

ROHIT NAIR, P.E.

Director of Engineering Standards & Grid Modernization Rohit.Nair@PacifiCorp.com Contact No: (b) (6)

SUMMARY

- Results-oriented professional with 14+ year experience in electric and power system engineering, utility system and equipment design, equipment specification development and supporting datacenter interconnection activities
- 5+ years of leading engineering teams and currently managing a 14 member team overseeing 2200+ equipment and construction standards and specifications for transmission, distribution, substation and civil
- Leadership role in Berkshire Hathaway Energy Global Supplier Development team to work with global suppliers to create and harmonize equipment specifications for increasing supplier diversity and supply chain logistics
- Experience working with various industry standards organizations in the power and energy sector. Currently the chair of IEEE renewable technologies sub-committee
- Directly managed several engineering design/implementation projects requiring significant cross-discipline knowledge of energy systems and operational needs
- Coordinated several equipment, power outage and power quality root-cause analysis
- Winner of several national and international awards for work on clean energy and power systems
- Superior communication, presentation and interpersonal skills

CORE COMPETENCIES

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|------------------------------------------------|----------------------------------|----------------------|
| • Engineering Design & Power System Operations | • Stakeholder Engagement | • Leadership |
| • Engineering Standards | • Equipment Specifications | • Critical Thinking |
| • Supply Chain Optimization | • Interconnection of datacenters | • People Management |
| | • Root-cause Analysis | • Project Management |

EDUCATION

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| • Master in Business Administration – Sullivan University, Kentucky – GPA 3.9 | June 2016 |
| • Master of Science in Electrical Engineering – Oklahoma State University (Stillwater) - GPA 3.7
<i>Thesis: 'Power System Design for a Smart Grid initiative at Oklahoma State University'</i> | August 2011 |
| • Bachelor of Electrical Engineering from University of Poona, INDIA - GPA 4.0 | August 2009 |

TRAINING AND CERTIFICATION

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| • Professional Engineer, Board of Technical Registration, Arizona, | 2014 - Present |
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PROFESSIONAL WORK EXPERIENCE

- Responsible for managing a 14 member team to develop PacifiCorp's construction standards for civil, substation, transmission and distribution as well as strategic roadmap on technology innovation
- Authored several PacifiCorp and Berkshire Hathaway Energy construction standards, technical whitepaper, engineering policies and guidelines for transmission and distribution, renewables and smart grid
- Overseeing a multi-year project to develop SCADA and communication infrastructure design and roadmap to connect all PacifiCorp distribution and transmission substations to the company's energy management system
- Leading multiple cross-business teams for Berkshire Hathaway Energy to harmonize and optimize engineering standards for various transmission, distribution and substation equipment.
- Support overhead standards design and specifications along with joint-use for allowing communication infrastructure to be added to existing distribution poles
- Experience with developing and delivering detailed business plans and technical proposals/presentations to regulatory staff and external stakeholders
- Managed and led multiple teams, contracts and oversee project planning, execution and delivery of multiple innovative technology projects with an overall budget of \$17 million
- Coordinating with multiple internal teams and external consultants to develop utility guidelines to study impact of high-power electric vehicle charging facilities on utility infrastructure and deploy appropriate mitigation plans
- Overseeing a multi-year project to develop SCADA and communication infrastructure roadmap to connect all PacifiCorp distribution and transmission substations to the company's energy management system.
- Support innovative technology activities such as commercial microgrid, utility-scale energy storage, net-zero communities and all-electric homes in Utah
- Participate in stakeholder activities and deliver tasks on multiple projects that have received multi-million dollar

- federal grants from the U.S. Department of Energy
- Experience in providing testimonies for regulatory and legislative hearings on grid modernization activities
- Lead engineering activities to deliver the annual Smart Grid business plan to state regulatory commissions
- Represent PacifiCorp in regulatory and stakeholder discussions on grid modernization, electric vehicles and distributed energy resources
- Previously performed several engineering studies on power quality, reliability and renewable energy projects to assist in delivering high customer satisfaction

PROFESSIONAL WORK HISTORY

- **PacifiCorp, Berkshire Hathaway Energy**
Director, Engineering Standards & Grid Modernization April 2022 – Present
Director, Engineering Standards November 2019 – March 2022
Grid Solutions Manager March 2019 – October 2019
Senior Engineer April 2015 – February 2019
Engineer June 2012 – March 2015
Associate Engineer June 2011 – May 2012
- **Oklahoma State University**
Researcher August 2009 – May 2011

INDUSTRY PRESENTATIONS

- United Nations Civil Society Conference, Energy Innovation through Collaboration, August 2019
- Intermountain Sustainability Summit: Grid Modernization at PacifiCorp, March 2018
- Utah State University SELECT Annual Meeting: Electric Vehicle Program at PacifiCorp, November 2017
- National Association of Corrosion Engineers: Behind the Light Switch, June 2017
- Utah PSC Technical Conference: Utah STEP Smart Inverter Project, December 2016
- Green Week at L-3 Communications: Renewable Energy at PacifiCorp, October 2016
- RMEL Distribution Engineers Workshop: Distributed Energy Resources, October 2016
- IEEE PES General Meeting: Utility-Scale Solar in Utah, July 2014

PROFESSIONAL MEMBERSHIPS (these positions are part-time, voluntary, and without remuneration)

- Board of Directors, Utah Net-Zero Consortium 2019 - Present
- Vice Chair, IEEE Renewable Technologies Sub-Committee 2019 - Present
- IEEE PES and SA Member 2012 - Present

ACHIEVEMENTS

- Multiple STAR Tier 2 and Tier 3 Awards – PacifiCorp, Berkshire Hathaway Energy 2014 - Present
- IEEE New Face of Engineering – Region 6 (Western USA) 2013 - 2014
- IEEE Outstanding Engineer – Northeast Region 6 2013 - 2014
- IEEE Outstanding Leadership – Utah Section 2013 - 2014
- IEEE New Face of Engineering – Utah section 2013 - 2014
- IEEE Outstanding Engineer – Utah section 2013 - 2014
- Student Excellence Award by Institute of Engineering & Technology (IET, UK) 2008 - 2009
- Service-Learning Volunteer Center Ambassador, Oklahoma State University 2010 - 2011

Blake M. Wayment

Cell: (b) (6)

• www.linkedin.com/in/blakewayment

• bmwayment@gmail.com

Education

Weber State University, AACSB accredited

- Master of Business Administration, 2020-2023
 - Pursuing certificate in Contract Management with course electives

University of Utah, AACSB accredited

- Bachelor of Science, Electrical Engineering, 2012-2016

Work Experience

Engineering/Operations Project Manager, PacifiCorp April 2020 – Present

- Manage 20+ transmission, distribution, substation, net metering and special projects
- Orchestrate project success with PacifiCorp engineering, operations and procurement, material vendors, solar interconnect customers, public and private landowners and construction contractors
- Report project successes, failures, and deliverables
- Develop project plans, perform risk analysis and utilize industry best practices

Senior Substation Engineer, PacifiCorp May 2016 – April 2020

- Training manager for RMP Substation Electrician Apprenticeship program
 - Program consisted of 30 students varying from 1-4 years into Apprenticeship
 - Planned and taught approximately 65% of apprenticeship in-class curriculum
 - Developed and administered apprenticeship exams
- Provided technical support to Operations Management and Field Crews
 - Reviewed, approved, and published 200+ documents, including creation of over 50 new commissioning and maintenance forms and procedures
 - Participated in substation commissioning, inspection, and maintenance
 - Innovated new processes that improved substation apparatus condition analysis

Student Engineer, PacifiCorp March 2013 – May 2016

- Drafted and designed EMS one-line displays
- Assisted Regional Dispatch by updating EMS policy and standards
- Managed and reported team progress for converting EMS displays to new system

CURRENT PROFESSIONAL OVERVIEW

Senior Vice President, Transmission and Distribution Operations at Rocky Mountain Power and Pacific Power, both operating divisions within PacifiCorp. Oversee approximately 3,000 employees and contractors delivering engineering, operations, maintenance, construction, and support organizations for the six-state electrical network in California, Oregon, Washington, Utah, Wyoming, and southeastern Idaho. PacifiCorp is a vertical integrated utility with approximately two million customers spanning a 143,000 square mile service territory and is a holding company within the Berkshire Hathaway Energy Corporation.

QUALIFICATIONS SUMMARY

Forty years in the electric utility sector has contributed to gaining valuable business knowledge and experience through increasing job roles and responsibilities. Proven record of leading, motivating and training while driving key business objectives and initiatives. Ability to set realistic priorities and complete multiple projects simultaneously, while maintaining high levels of competent decision making, problem solving and organizational effectiveness. Multi-cultural experience has added to existing ability to maintain an open mind and communicate effectively with a widely diverse group of individuals, on all levels of an organization.

EDUCATION

- ◆ Graduate of University of Idaho, Utility Executive Course - 2007
- ◆ Graduate Marsh Valley High School, Arimo, Idaho - 1979

PROFESSIONAL EXPERIENCE

PacifiCorp

2022–present **Senior Vice President, Power Delivery**

Portland, Oregon
Salt Lake City, Utah

Responsible for overseeing operations, maintenance, construction, engineering, asset management and support organizations for Rocky Mountain Power and Pacific Power operating divisions within PacifiCorp. In this capacity, he is overseeing an organization that serves approximately two million customers in Utah, Wyoming, southeastern Idaho, Oregon, northern California and Washington.

2015–2021 **Vice President, Transmission & Distribution Operations Service**

Portland, Oregon
Salt Lake City, Utah

Responsible for establishing the vision and strategy to lead the execution of operational initiatives and day-to-day management that entails safe and reliable operation of the electrical network, appropriate asset management philosophy and prudent engineering application while maintaining financial strength and applying appropriate business efficiencies and controls. Responsible for coordinating, monitoring and managing concurrent distribution and transmission project teams and resources in the successful development and execution of projects.

2006–2015	Managing Director, Transmission & Distribution Support Service	Portland, Oregon Salt Lake City, Utah
	Responsible for PacifiCorp's support departments: vegetation management, transportation (vehicles and equipment), logistics, joint use and rubber goods testing facilities, field inspections and compliance scheduling. Provide necessary functions to support the day-to-day network operation and maintain tracking and compliance of federal and state regulation.	
2003–2005	Quantum Leap Director	Salt Lake City, Utah
	Delivered multi-year \$203 million dollar Wasatch Front Infrastructure Improvement Program (Quantum Leap) which included construction of new facilities, renovation of existing assets along Utah's Wasatch Front. Co-author Upgrading System Capacity-Transmission & Distribution World magazine.	
2002	2002 Winter Olympics	Salt Lake City, Utah
	Responsible for PacifiCorp's (Utah Power) 2002 day to day Winter Olympic operations.	
2000-2002	Control Center Director Operations	Portland, Oregon Salt Lake City, Utah
	Overseen 7x24 control center operations responsible for distribution outage management application, load flows, system electrical network operations, dispatch coordination and distribution application system support.	
1998-2000	Director Customer Service	Salt Lake City, Utah
	Key strategic and operational leader responsible for developing process and performance improvements that delivered key service outcomes to customers through multiple channels.	
1996–1998	Operation Manager	Salt Lake City, Utah
	Direct operational functions in a geographical defined area. Set policies and ensure adherence to company standards and procedures. Create functional strategies and specific objectives to develop and manage budgets, safety and deliver customer requests.	
1984 – 1995	Apprentice/Journeyman Lineman	Shelley, Idaho
	Install, maintain and repair high-voltage electrical lines and systems.	
1981 – 1984	Meter Reader/Collector	Lava Hot Springs, Idaho
	Gather electric consumption usage data and monitor utility meter asset health. Locate businesses and customers with back-due accounts and notify of past due billings.	

OTHER CURRENT SUPPORTING CORPORATION ACTIVITIES

- ◆ Trustee of the IBEW Western Utilities Health & Welfare Trust Fund (institutional appointment, no remuneration, part-time)
- ◆ Board of Directors of NeighborWorks-Salt Lake City (institutional appointment, no remuneration, voluntary)
- ◆ Member of the Utah Governor's Cybersecurity Task Force (institutional appointment, no remuneration, part-time)

STEVEN C VANDERBURG

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— steven.vanderburg@pacificorp.com

I have a broad range of meteorological experience spanning 21 years in the Western U.S., including 11 years as a utility meteorologist and 10 years as a forecaster at the National Weather Service. I have a proven track record of providing mission critical decision support services during high impact weather events, including Public Safety Power Shutoffs. Since 2011, I have worked on multiple high performing, innovative teams that have radically changed the way electric utilities manage wildfire risk. I am an ardent believer in the power of collaboration through public, private, and academic partnerships as a means to solve many of today's biggest energy challenges. I remain just as excited and passionate about my work as a meteorologist today as when I started two decades ago.

EDUCATION

University of Oklahoma, OK
B.S. Meteorology, Minor in Mathematics - 2004

PROFESSIONAL EXPERIENCE

Meteorology Manager, PacifiCorp, Portland, OR **2021- present**

Program building and management including: Responsible for managing forecast operations including staffing, product delivery, on-duty rotation, emergency response coverage, and other related administrative tasks. Improves real-time and operational forecasts through process improvements via new technologies and advancements. Responsible for maintaining and enhancing weather forecast and decision support procedures. Oversees the expansion a utility-owned Mesonet of weather stations. Manages the delivery of complex inter-related projects associated with the company's Advanced Weather Forecasting and Situational Awareness initiative. In-house Weather Research & Forecast (WRF) model (1.3 million square mile domain, 2km resolution, 96-hour forecast). Wildfire modeling technology and subscriptions. Machine learning and impacts-based forecasting models. Situational Awareness websites and dashboards. In-house High Performance Computing Cluster (HPCC). Directly supports the decision-making process during ECC Activations for Public Safety Power Shutoffs & other severe weather events. Works closely with engineering and operational organizations to integrate weather information into fire risk mitigation and community resilience projects. Provide subject matter expertise in responding to data requests or other inquiries from external stakeholders, customers, and regulators regarding meteorology-related programs, methods, and progress.

Principal Meteorologist, San Diego Gas & Electric, San Diego, CA **2011-2021**

Directly supported the decision-making process during EOC Activations for Public Safety Power Shutoffs, load curtailment, & other severe weather events. Provided daily meteorological support to a wide variety of company departments including Electric Distribution and Transmission Operations, Electric Regional Operations, Emergency Services, and Customer Programs (Demand Response). Managed the nation's first large-scale utility-owned mesonet, which now consists of 220 weather stations and two mobile atmospheric radar wind profilers and radiometers. Participated on a Tiger Team – Apollo – whose mission was to develop solutions to reduce the overall frequency and impact of Public Safety Power Shutoffs. Collaborated on a team that developed innovative and nationally recognized technologies to mitigate the risk of utility-caused wildfires including: Fire Potential Index, Santa Ana Wildfire Threat Index, Wildfire Risk Reduction Model. Collaborated on a team that developed innovative forecasting tools to support the integration of distributed energy resources including: Solar Potential Index, Load Forecast Model. Collaborated on a team that developed an Outage Prediction Model to better anticipate and recover from high impact weather events. Analyzed SDG&E's local Weather Research and Forecasting (WRF) Model ensemble to prepare routine and non-routine forecast products. Oversaw forecast products and acts as lead forecaster during severe weather events. Reviewed proposed legislation and provided guidance as part of SDG&E's Wildfire Legislation Team. Routinely briefed policymakers at the local, state, and federal level. Provided extensive testimony to the California Public Utilities Commission as part of SDG&E's

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effort to recover damage costs associated with the 2007 wildfires (WEMA). Routinely spoke at public events such as community town halls, professional conferences, summits, etc.

Meteorologist / Forecaster, National Weather Service, Reno, NV

2010 - 2011

Provided and coordinated weather information, forecasts, and warnings for an area covering much of northeast CA and northwest Nevada, including the Sierra Nevada and Lake Tahoe. Conducted a continuous weather watch which involved the interpretation of doppler radar data, satellite imagery, and the analysis of other meteorological and hydrologic data. Provided weather briefings and other decision support services to fire agencies and emergency managers at the local and state level during severe and hazardous weather situations. Provided the primary guidance and quality control for the local doppler radar program. Maintained and repaired meteorological instrumentation. Assisted the local Fire Weather Program Manager. Performed local research.

Meteorologist / Forecaster, San Diego Gas & Electric, San Diego, CA

2001 – 2010

Provided and coordinated weather information, forecasts, and warnings for San Diego, Orange, western Riverside, and southwestern San Bernardino Counties. Conducted a continuous weather watch which involved the interpretation and analysis of a variety of meteorological and hydrologic data. Provided weather briefings and other decision support services to emergency managers and fire agencies at the local and state level during severe and hazardous weather situations. Provided the primary guidance, training, and quality control for the local office fire weather program, storm data program, and verification program. Maintained and repaired meteorological instrumentation. Performed local research.

PROFESSIONAL PUBLICATIONS

- Rolinski, T., Capps, SB, Fovell, RG, Cao, Y., D'Agostino, BJ, and Vanderburg, S. (2016). The Santa Ana Wildfire Threat Index: Methodology and Operational Implementation. *WEATHER AND FORECASTING*, 31(6), 1881-1897.
<http://dx.doi.org/10.1175/WAF-D-15-0141.1>
- Vanderburg, S., I. J. Small, and B. Maxwell. 2010: The Utility of a High Level Most Unstable CAPE (HLMUCAPE) and a High Level Lifted Index (HLLI) for Forecasting Elevated Convection in Southwestern California. Western Region Technical Attachment Lite No. 10-04, https://www.weather.gov/media/wrh/online_publications/talite/talite1004.pdf
- Small, I. J., T. Mackechnie, and S. Vanderburg, 2009: A Closer Look at the 22 May 2008 Severe Weather Outbreak and Flash Flooding in Southern California. Western Region Technical Attachment No. 09-01
<http://www.wrh.noaa.gov/wrh/09TAs/TA0901.pdf>
- Small, I. J., T. Mackechnie, and S. Vanderburg, 2009: The Dramatic Effect of Tornadic Severe Weather on a Rapidly Growing Urban Interface. Symposium on Urban High Impact Weather, the 89th American Meteorological Society Annual Meeting, Phoenix, AZ.
- Isla, M., Vanderburg, S., Medjer, C., Paschall, D., 2004: Technical Memorandum NWS WR-270 - "Climate of San Diego, CA"
https://www.weather.gov/media/wrh/online_publications/TMs/TM-270.pdf

MEMBERSHIP

Member of the American Meteorological Society

Emily Weaver J.D., M.P.A.

Emily.Weaver@PacifiCorp.com

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SKILLS

Program development and management	Leadership and collaborative partnerships
Training development and facilitation	Policy and procedure development, implementation, and evaluation
Data collection, analysis, and presentation	Relationship management
Survey design and trend analysis	Mediation, negotiation, and conflict resolution
Mentoring and coaching	Researching, writing, and advising
Organizational behavior and culture	Public speaking
Compliance	Strategic planning and evaluation

EDUCATION

Juris Doctor and Masters of Public Administration, University of Wyoming College of Law, May 2015
Thurman Arnold Award Recipient; Member of Pi Alpha Alpha, Public Administration Honor Society

Bachelor of Arts, Biology, Lawrence University, May 2010
McNair Scholar

LICENSES & CERTIFICATIONS

- Wyoming State Bar – licensed attorney
- Society of Human Resources Management (SHRM)- Senior Certified Professional (SCP)

PROFESSIONAL EXPERIENCE

PacifiCorp, Portland, OR
Diversity, Equity & Inclusion Director, 2021-Present

Reporting to the presidents/CEOs of the company, I lead the development and implementation of a comprehensive organization-wide DEI strategy with a vision of continuing to build an inclusive culture that celebrates and welcomes diversity, ensuring everyone feels valued and respected and enhances the connections the organization has with our communities. Specific duties include developing and evaluating various DEI strategies: communications, strategic partnerships, community engagement, employee resource groups, and diversity recruiting and retention.

PacifiCorp, Casper, WY
Labor Relations Specialist, 2020-2021

I served as the labor relations representative for generation, transmission and distribution in Wyoming and was responsible for three collective bargaining agreements. In this role, I worked to promote positive labor relations while managing the grievance process, collective bargaining agreement extension and all other matters related to labor relations.

Legal Aid of Wyoming, Casper, WY
Staff Attorney, 2019

As staff attorney, I managed the Casper office and was responsible for program, budget, and staff oversight. This role required providing diligent and competent legal representation on a variety of civil legal issues to diverse clients, including those who identified as disabled, veterans, elderly, or experiencing poverty. Specific duties included negotiating settlements for clients, strategizing with non-profit organizations to address public policy issues regarding wrongful eviction practices which disproportionately affected women and those experiencing poverty. In addition, I secured various accommodations and benefits for clients with disabilities, including job-related accommodations, student loan forgiveness, and social security disability benefits.

University of Notre Dame, Office of Institutional Equity, South Bend, IN
Sr. Deputy Title IX Coordinator/Lead Investigator, December 2017- June 2019
EEO Consultant/Investigator, March 2017-December 2017

Served as lead investigator for all university investigations related to sexual and discriminatory harassment, retaliation, and other employment-related issues. I had oversight responsibility for university Title IX, affirmative action, and EEO compliance.

Wyoming Survey and Analysis Center (WYSAC), Laramie, WY
Assistant Research Scientist & HIPAA Privacy Officer, February 2015-February 2017

Guided coalitions, programs, and organizations through program development and implementation, evaluation and logic models, needs assessments, strategic planning, survey development, data collection, data analysis, and data presentation. Audited programs to ensure compliance with grant requirements, identified gaps, and designed solutions to remedy any areas identified as non-compliant.

VOLUNTEER SERVICES (All of these positions are part-time, voluntary, and without remuneration)

Diversity, Equity, and Inclusion Section, Wyoming State Bar. (2020-Present).

Serving as in various roles (including chair, past-chair, and at-large member) of the section, my responsibilities include leading DEI section initiatives , including navigating the first year of this newly launched section. Using a results-oriented framework, I led the development of various initiatives to cultivate DEI in the Wyoming legal communities.

Volunteer Attorney, Wyoming Free Legal Answers. (2020-Present).

Provide free legal counsel on matters related to disability accommodations, discrimination/harassment/retaliation, landlord/tenant, and other employment law issues.

Board of Trustees, Youth Crisis Center. Casper, Wyoming (2019-2021).

As part of the executive board, I provided leadership for the Youth Crisis Center, a non-profit that provides crisis shelter and group home services for children in need. During 2021, I also served as the volunteer, interim executive director where I managed personnel, budgeting, fundraising, compliance, and ensured efficient and effective business operations.

ELEONORE (NORA) DIMITROV YOTSOV

Portland, OR | (b) (6) | nora.dimitrov@gmail.com

PROFESSIONAL SUMMARY

Experienced leader with over 30 years of expertise in managing and motivating large and diverse teams. Recognized consistently for exceptional performance and contributions to success for the organization. Strengths in collaboration and motivation backed by training and experience in Emergency Management, Public Safety and Security and extensive critical response operations.

SKILLS

- NIMS compliance expertise including delivery of ICS training, use of HSEEP for AAR/IP and CAP
- Regulatory expertise including PUC reporting, FAA Part 139, TSR 1542 and 1544
- Business continuity, asset deconfliction and long-range resilience planning expertise
- Change management and vision for reorganization to best meet operational needs
- Collaborative, organized and effective stakeholder engagement daily and during crisis response
- Ability to prioritize complex and competing issues
- Advocate for balancing diversity, equity, inclusion focusing on cultural issues
- Preparedness, crisis response and recovery expertise via real world response, planning, training, and exercise conduct
- Managing sensitive security issues with respect and focus on safe resolution
- Grant/fiscal management including most DHS grants
- Strategic planning and policy development
- Labor management and negotiations

EDUCATION

Bachelor of Arts: Anthropology/Political Science, University of Las Vegas (UNLV), Las Vegas, NV 06/2004

Master of Science: Crisis and Emergency Management, University of Las Vegas (UNLV), Las Vegas, NV 06/2016

CERTIFICATIONS

American Association of Airport Executives - ACE Security 2021 Clackamas

County Leadership Academy 2018

Certified Emergency Manager (CEM) 2015, recertified 2020

Oregon Certified Emergency Management Specialist (ORCEMS) 2012, recertified 2017 Oregon

Medicolegal Death Investigator (OCMDI) 2008

WORK HISTORY

Director, Emergency Management and Meteorology. 05/2022 to current

PacifiCorp – Portland, OR and Salt Lake City, UT

- Oversee Emergency Managers and Meteorologists to manage day to day risks including, wildfire, severe weather, earthquake, security and other natural and man-made disasters for a six state region.
- Change management including developing a new team, implementing a new emergency response structure process improvements and a training and exercise program.
- Oversee the Public Safety Power Shutoff (PSPS) program and implementation.
- Managing technology project such as Technosylva, Veoci, AlertWildfire, Pano360, and others.
- Regulatory compliance and plan development related to a variety of threats and hazards.

Senior Manager, Emergency and Security Operations, 02/2019 to 05/2022

Port of Portland – Portland, OR

- Oversee staff of 45, in Aviation Security, Emergency Management, Emergency Operations Center (EOC), Security Badging, 9-1-1 Communication Center, Maintenance Operations Center, Paging and Information.
- Redesigned and implemented the Emergency Management and EOC program recruiting 80 staff in 2019.
- Led EOC response for a variety of disasters including; active shooter, winter snow/ice storm, wildfire smoke, planned events, emergency repatriation, COVID-19 and Build Back Better (B3) recovery planning.
- Developed the concept of operations and led COVID-19 mass vaccination operation at the Red Economy parking lot January – June, 2021 providing over 250,000 vaccines to the public.
- Extensive change management including implementing ProQA, build out of a new facility, the co-location and consolidation of 3 disparate call centers and integration of Response Operations Coordination Center.

- Reorganized the 9-1-1 center management structure for better span of control and technical efficiencies.
- Develop, update, test and implement emergency plans, after action reports and improvement plans.
- Maintain and analyze budgets, capital projects, labor management and negotiations, technologies, and contracts.
- Extensive coordination and program development with Risk and Safety Director creating strategy to address safety standards focused on emergency evacuation, construction, fatigue among other risks.

DHS Certified Instructor, 08/2018 to 01/2020

National Disaster Preparedness Training Center, NDPTC – Honolulu, HI

- Instructed AWR: 356 Community Planning for Disaster Recovery and AWR: 347 Climate Adaptation Planning for Emergency Management at various locations throughout the United States.

Strategic Program Coordinator, 12/2006 to 02/2019

Clackamas County Disaster Management – Oregon City, OR

- Developed overall program and curriculum for Clackamas County EOC.
- Developed, planned and executed programs such as the EOC Academy, Evacuation/Re-Entry Planning, Incident Command System (ICS), Continuity of Operations (COOP), and National Incident Management System (NIMS).
- Recruited, trained and managed a leadership team with staff of up to 115 paid and volunteer emergency responders.
- Developed and implemented plans such as Dam Failure, Evacuation, Seismic Bridge Priorities, Emergency Transportation Routes, Emergency Operations Plans (EOP), Mass Fatality, Employee Disaster Reporting (EDR) and Readily Deployable Content (RDC) innovating disaster response and recovery.

9-1-1 Dispatcher, 06/2002 to 07/2006

Clackamas County 9-1-1 (CCOM) – Oregon City, OR

- Worked as 9-1-1 fire and medical dispatcher.
- Researched cases for the District Attorney's office, other investigators, law/fire agencies, media, and citizens.
- Trained staff and produced evidence requests for ongoing investigations and media events.

Manager, Ground Operations and Control Center HUB, 07/1993 to 04/2001

Northwest Airlines Inc – Minneapolis, MN

- Oversaw all areas of ground operations, FAA regulations, contract negotiations, security, FIS (Immigration, Customs and Agriculture), control center at LAS, ORD and MSP.
- Managed a staff of 70-130, daily operations with various vendors and governmental agencies.
- Operational control of KLM-Dutch Airlines, KAC-Kuwait Airways and FI-Iceland Air.
- Developed new reporting and auditing procedures to understand and improve performance and delay factors.
- Audited airline passenger, cargo, and security screening procedures to ensure compliance.
- Worked at Las Vegas McCarran International Airport (LAS), Chicago O'Hare International Airport (ORD) and Minneapolis/St. Paul International Airport (MSP)

Archaeological Technician, 06/1990 to 06/1993

Desert Research Institute – Quaternary Sciences Center, QSC – Mercury, NV

- Project coordination including survey, mapping, excavation, plotting, recording, charting, analysis and inventory management; contracted under the DOE at the Nevada Test Site in Mercury, NV.

CURRENT CONTRIBUTIONS AND AFFILIATIONS

These positions and affiliations are part-time, voluntary, and unremunerated.

RDPO Steering Committee Chair 2022 RDPO

Steering Committee Vice Chair 2021

IAEM USA Critical Infrastructure Caucus 2019 – current IAEM

Featured CEM Mentor 2018 - current

IAEM International Conference Planning Committee 2017 – current

IAEM USA Climate, Water and Weather Caucus 2015 – current

NW Oregon Mass Fatality Regional Response Team (RRT) 2013 – current

International Association of Emergency Managers (IAEM)

American Association of Airport Executives (AAAE)

NANETTE QUITT, SPHR, SHRM-SCP

Contact Information: Nanette.Quitt@pacificorp.com • (b) (6)

EDUCATION & TRAINING/CERTIFICATIONS

- Bachelor of Science in Health Sciences – Oregon Institute of Technology
- Master of Science in Management & Leadership – Western Governors University [*1 Semester still to be completed*]
- Certified Senior Professional in Human Resources (SPHR)
- SHRM Senior Certified Professional (SHRM-SCP)
- Strengths Development Inventory (SDI) Facilitator Certification (Training tool – www.personalstrengths.com)
- Emergenetics International Associate (Training tool – www.emergenetics.com)

PROFESSIONAL EXPERIENCE

Director of Labor Relations, PacifiCorp	October 2021 to Present
Labor Relations Specialist (Principal), Pacific Power	October 2019 to October 2021
Northern Nevada Labor Relations Manager, NV Energy	August 2011 to October 2019
Human Resources Manager, Truckee Meadows Water Authority	June 2007 to August 2011
HR Manager/Business Partner, Renown Health	June 2003 to June 2007
HR Generalist & Regional Trainer, HealthSouth Rehabilitation Hospital	November 2001 to June 2003
HR Generalist, ShareGate Inc.	March 2000 to October 2001

PROFESSIONAL AFFILIATIONS & PUBLICATIONS

(ALL OF THESE POSITIONS ARE PART-TIME, VOLUNTARY, AND UNREMUNERATED)

- Member, Rogue Valley Human Resources Association
- Member, [Society of Human Resources Management](#)
- Former Chairperson, [Nevada State Apprenticeship Council](#)
- Former Board of Directors, [Education Alliance of Washoe County](#)
- Former Member, Northern [Nevada Human Resources Association](#)
- Former Member, Northern Nevada Apprenticeship Coordinators Association
- Former Member, Career & Technical Education (CTE) Advisory Panel
- Former Board of Directors, Nevada State SHRM Council

Education

George Fox University, Newberg, OR USA

Bachelor of Science Mechanical Engineering, with a minor in Chemistry – Magna Cum Laude, May 2006

Kansas State University, Manhattan, KS USA

Master of Engineering Management (MEM), May 2015

Professional Membership and Licensure

Professional Engineer, Oregon License number 77694PE

Professional Engineer, Utah License number 7888021-2202

Professional Experience

PacifiCorp – Lloyd Center Tower, March 2021-Present

Wildfire Mitigation Delivery Director

- Responsible for Wildfire Mitigation-based grid hardening projects in California, Oregon, and Washington
- Projects include overhead/underground line rebuild, expulsion equipment replacement, system automation, communications (radio, cell, communication towers, and private fiber), and weather stations
- Managed increase in Line Rebuild projects from 1 mile in 2020 to 63 miles in 2022

PacifiCorp – Lloyd Center Tower, June 2020-March 2021

Regional Asset Manager

- Responsible for project review and investment recommendations for: new connect, deteriorated asset, storm and casualty, joint use, and accommodation requests
- Revamped Large load request process for customer connected loads greater than 1MW
- Updated process for actual cost project close out

PacifiCorp – Albany Willamette Operations Center, September 2017-June 2020

Transmission and Distribution Manager and Area Manager – New Connects and Metering

- Responsible for Pacific Power's largest operating area serving 135,000 customers
- Managed 25 IBEW Local 659 employees: metermen, collectors, estimators, service coordinators, and apprentices; responsible for hiring, training, coaching, and discipline
- Review and approve all APRs for transmission and distribution within the Willamette Operations and Lincoln City operating areas totaling over 1000 APRs annually
- Review/ authorize work scope and cost changes, including project completion changes notices
- Responsible for timely correction of conditions; outage and storm management
- Awarded Stars 3 for managing project replacing distribution equipment at Oregon Freeze Dry and improving customer satisfaction score from 2 to 10 from 2018-2019

PacifiCorp – Lake Side Plant, January 2015-September 2017

Operations Manager

- Managed 16 IBEW Local 57 Senior Operations Technicians (control room operators): responsible for hiring, training, coaching, and discipline
- First point of contact for all plant health, safety, environmental, maintenance, and operational problems outside of business hours
- Lead RCA on all plant failures including hot corrosion damage on block 1 GT blades, 2 environmental permit exceedances, several equipment failures, and several operational upsets
- Budgeted and cost tracked \$3.8M annual operations budget
- Managed overhaul projects: 2015 Block 1 50K hour overhaul: inlet filter and evaporative cooler replacement, pressure vessel inspections and repairs, all start-up and shutdown activities, tagout system, and post-outage tuning; 2016 Block 2 12.5K hour CI: Inspections of HRSGs, inlet houses, water boxes, hot well, SCR repairs, all start-up and shutdown activities, tagout system, and post-outage tuning
- Redesigned Commissioned 120 gpm high purity water treatment plant

PacifiCorp – Gadsby Plant, October 2013-January 2015

Operations Manager

- Managed 12 IBEW Local 57 Control Room Operators and 2 Laboratory Technicians; responsible for hiring, training, coaching, and discipline
- First point of contact for all plant Operational problems outside of business hours
- Lead RCA on all plant failures including Unit 5 generator fan failure, Unit 2 generator hydrogen seal failure, several chemical spills, several equipment failures, and several operational upsets
- Responsible for black start generator operation/testing; budgeted/ tracked \$2.0M/year operations budget
- Managed Overhaul projects: 2014 Unit 3: Steam turbine open/clean/close, replacement of row 1 blades, valve work, all startup and shut down activities, tagout system; 2014 Unit 2: Hydrogen seal replacement; 2014 Unit 5: Generator rewind, and fan blade failure RCA

PacifiCorp – Gadsby Plant , July 2011 – October 2013

Engineer Lead/Senior

- Managed Little Mountain rental boiler project: Designed, managed construction and commissioning of 70KPPH rental boiler on 11-day emergency project—project completed 3 hours early to prevent \$1M/day liquidated damages; designed, managed construction, and commissioning of 120 KPPH rental boiler
- Managed Overhaul projects: Unit 2 2012: high energy piping inspections and repairs, cooling tower inspections with rebuild and fill replacement, boiler tube replacement, circulating water line coating; Unit 4 2013: Emergency 40 MW generator rewind—designed new support structure and hydraulic cart system for removal of Unit 4-6 generators
- Managed 2 IBEW Local 57 Laboratory Technicians
- Diagnosed and repaired various plant failures including re-engineering Unit 1 Mechanical-Hydraulic governor, two 2500 HP natural gas compressor failures, boiler tube leaks, Unit 3 boiler feed water pump failure due to water hammer

PacifiCorp – Generation Engineering, August 2008-July 2011

Engineer Lead/Senior

- Subject matter expert (SME) for combustion, pulverizers, and soot blowers
- Advised and trained plant engineers and management as SME; reported to senior management as (SME) for rate cases, budgeting, and best practices
- Test and tune combustion systems for reduced slagging, emissions, and fuel usage
- Project manager on purchase of nine soot blower control system upgrades at five plants
- Start-up and optimization of two automated soot blowing control systems; conducted RCAs of pulverizer fires and explosions at multiple plants
- Conducted Naughton plant coal supply study leading to contract changes in quality specs on 20-year \$1.6B contract

PacifiCorp – Jim Bridger Plant, May 2006-August 2008

- Budgeted, scoped, bid, and managed construction for \$30M capital and \$4M O&M on 2008 overhaul of Unit 4 boiler: supervised 4 company staff and 13 contract companies with a peak labor force of 350; utilized SAP for cost control and Primavera for schedule tracking; identified and corrected critical structural deficiency in scaffold drawings submitted by scaffolding contractor's professional engineer; negotiated contract close out to cover liquidated damages (schedule) and work not included in the original scope; awarded Stars 4 level achievement and \$1000 bonus for project performance
- Participated in budget, scope, bid, and mgt. of \$20M capital/\$4M O&M for 2007 rebuild of Unit 3 boiler
- Budgeted, scoped, and bid \$20M capital and \$2M O&M for 2009 rebuild of Unit 2 boiler
- Plant engineer for produce steam (boiler) process: Trouble shoot and inspect failed equipment, recommissioned glycol air preheater last used in 1980; inspect and determine best repair for boiler tube failures; supervise journeymen completing plant maintenance; manage 10-year capital plan including forecasting project needs and costs averaging \$30M/year

David L. Heffernan, PE

Engineering Manager, Protection and Control Engineering—David.Heffernan@pacificorp.com— (b) (6)

I am an experienced P&C engineer and Manager with over a decade experience in substation design and protection system settings development. My experience includes design, settings and detailed system analysis work on systems ranging in voltage from 4.16kV to 525kV. As manager I provide leadership and strategic direction for the P&C department including oversight of project delivery, resource management and quality assurance.

EDUCATION

MEng, Electrical & Computer Engineering, Portland State University – 2009

BA, Criminal Justice, University of Alaska, Fairbanks – 1998

CERTIFICATION and TECHNICAL TRAINING

Professional Engineer, Oregon: 82268PE

Prot 401, Protecting Power Systems for Engineers, Provided by: Schweitzer Engineering Laboratories – 2008

Prot 407, Transmission Line Protection, Schweitzer Engineering Laboratories – 2009

Advanced ASPEN Oneliner Training, Advanced Systems for Power Engineering Inc. – 2010

Communications for Power System Protection, University of Wisconsin at Madison – 2011

RELEVANT WORK EXPERIENCE

Manager Protection and Control Engineering – PacifiCorp: October 2016 – Current

- Apply engineering management principles to support the Company's protection and control systems through capital project delivery and engineering support.
- Ensure protection and control design processes are supported with engineering resources while managing issues associated with field construction and system operating conditions.
- Responsible for daily communication of expectations, coaching employees, providing ongoing feedback, and working collaboratively with other departments.
- Facilitate change, develop others, foster continuous improvement and drive for compliance to a developed standard.
- Assess industry practices as well as local factors that have a direct impact on performance both physical and financial.
- Ensure that the best technical processes and engineering practices are applied across the company
- Oversee process centered transition activities and special projects.
- Ensure compliance with federal, state, or local regulations.
- Recommend and implement action plans for achieving objectives.
- Select, coach, and develop employees.
- Review and evaluate employee performance and prepare annual reviews.

Senior Protection and Control Engineer – PacifiCorp June 2015 to October 2016

- Design, develop, modify, and evaluate systems, process, or facilities to support Company objectives, utilizing engineering methods.
- Develop highly complex engineering studies, plans, specifications, calculations, evaluations, design documents, and performance assessments.

David L. Heffernan, PE

Engineering Manager, Protection and Control Engineering—David.Heffernan@pacificorp.com— (b) (6)

- Determine methods and techniques for obtaining results.
- Act as a lead expert in the work group; train and mentor associate and career level engineers, technicians and drafters.
- Recommend alternative engineering solutions to management to meet business needs.
- Deliver on commitments and manage outside engineering services to accomplish the assigned work.
- Maintain project timeliness and budgets.
- Analyze and design engineering methods.
- Design, develop, modify, and evaluate systems, processes, or facilities to support company objectives

Electrical Engineer SPC Technical Services, TECS-AMPS – Bonneville Power Administration September 2012 to June 2015

- Provide technical leadership and training for engineers and Craft personnel on all aspects of Protection and Control Equipment and Application.
- Determines operational requirements for protective systems and initiate project proposals to replace obsolete equipment.
- Maintain familiarity with advanced technology and coordinate maintenance requirements with design and field organizations as well as manufacturers.
- Work with NERC standards and stakeholders to create work standards and direct process development for implementation.
- Interpret overall BPA policy and standards for BPA's NERC CIP covered equipment such as relays and communication processors, to determine maintenance and operating requirements.
- Serve BPA as a technical resource on the NERC standards and requirements.
- Work with Engineering Design to create new Protection and Control design standards.
- Supervise and direct the work of craftsmen and one engineers in the completion of their daily duties.

Protection and Control Engineer – PacifiCorp May 2007 to August 2012

- Design, develop, modify, and evaluate systems, process, or facilities to support Company objectives.
- Develop electrical engineering studies, plans, specifications, calculations, evaluations, design documents, and performance assessments.
- Determine methods and techniques for obtaining results.
- Guide and direct associate level engineers, technicians and drafters.
- Recommend alternative solutions to management in area of specialty on engineering solutions to meet business needs.
- Deliver on commitments and manage outside engineering services to accomplish the assigned work.
- Analyze and design engineering methods.
- Design, develop, modify, and evaluate systems, processes, or facilities to support company objectives

Christina M. Medina

Personal Mobile: (b) (6) | Work Mobile: (b) (6) | Christina.Medina@pacificcorp.com / Christina.Kruger@icloud.com

Education & Training

Innovation in Leadership B.S., Minor Psychology, Southern Oregon University, Ashland, OR

Oregon American Leadership Fellowship Program Graduate 2018

Medford Chamber of Commerce Community and Business Leadership Graduate 2017

Berkshire Hathaway Energy Leadership Development Graduate 2019

Professional History & Accomplishments

Pacific Power, Mgr., Stakeholder Policy & Engagement OR/WA 08/2022-Present

Design, deliver and successfully implement stakeholder processes and outcomes in response to goals and regulatory requirements in California, Oregon and Washington. Identify and develop opportunities for broad, diverse stakeholder engagement and incorporation of feedback from stakeholders into business decision-making outcomes.

- Ensure success of equity-based processes through tracking goals and objectives, statutory and regulatory requirements, and expectations.
- Implement and support programs that directly impact customers and company goals.
- Facilitate successful outreach and collaboration on programs impacting BIPOC, tribal, rural, coastal, and other groups to facilitate outreach and collaboration on community programs.
- Identify and manage the customer-company relationship development with a wide range of decision-makers in the customer organizations, i.e., account management, legal, production, engineering, finance, and other function areas as identified.
- Provide input on contracts, procedures, support materials, marketing and communication plans, and training materials for assigned programs.

Pacific Power, Regional Business Manager, Medford, OR 08/2015 – 08/2022

Customer and Community liaison representing a regional hub of over 300 employees for Pacific Power in Jackson, Josephine Counties, Oregon, and Del Norte County, California. Area representation for local government affairs, economic development, account management, program engagement and implementation, and stakeholder relations.

- Developed a positive influence on customer decisions to support PacifiCorp as their energy service provider and to improve customer loyalty and satisfaction.
- Oversaw the successful implementation of equity-focused stakeholder groups. Coordinated with internal and external stakeholders to design meaningful interactions.
- Maintained, established, and supported relationships with large business, governmental organizations and social justice and environmental justice groups.
- Coordinated company sponsored events to increase community presence. Served as primary liaison between customers and internal operations teams.
- Prepared/delivered Master Electric Services Contracts, Engineering Study Agreements and collect appropriate funding's associated.
- Identified/managed customer and PacifiCorp relationship development with a wide range of decision-makers in the customer organizations, i.e., account management, legal, production, engineering, finance, and other function areas as identified.

Pacific Power, Corporate Account Manager, Medford, OR

07/2011 - 08/2015

Develop a positive influence on customers' future decision to support PacifiCorp as their energy service provider and improve customer loyalty and satisfaction. Provide excellent customer service, coordinate company sponsored events and increase our community presence. Serve as a primary customer contact and liaison between our customer's and internal operations teams. Prepare and deliver Master Electric Services Contracts, Engineering Study Agreements and collect appropriate funding's associated. Report and track customer load forecasting.

Pacific Power, Metering Operations Manager, Medford, OR

06/2010 - 07/2011

Managed Medford metering, 25 employees, office accounting functions, customer office operations, meter reading, budgeting, strategic planning, human resources, goal reporting and tariff management. Region was comprised of four goal reporting and tariff management.

Pacific Power, T&D Operations Work Planner, Portland, OR

05/2009 - 06/2010

Identified, prioritized, and ensured that scheduled work for district resource capacities aligned with actual for the T&D Operations budget within the Work Planning Department. Developed plans, designs, resource requirements, and cost estimates for construction and maintenance projects involving T&D facilities, telecommunications, generation, and properties and facilities projects. Wrote/assembled work packages including drawings, descriptions, procedures, and necessary parts to direct crews. Planned/coordinated resource availability to accommodate the PacifiCorp load obligations. Monitored systems operations, adjusted operational plans accordingly. Independently developed cost estimates and resource requirements for construction and maintenance projects involving T&D and telecommunication facilities. Reviewed design drawings to perform material take-offs and determine resource requirements.

Pacific Power, Outage Management Analyst, Portland, OR

09/2007 - 05/2009

Real-time monitor outage systems, outage desk and call center performance. Audited data, business processes and coordinated special projects. Protect the overall health of the workplace including safety, health, wellness, and morale. Coordinated and conduct meetings, training and co-facilitated as a subject matter expert as well as support help desk calls as available.

Pacific Power, Business Analyst, Portland, OR

04/2002 - 09/2001

Lead Landlord Link Program, AHT Lab Mentor, Safety Committee Board Elect; Web Billing Expert, NSC, Bilingual Spanish - Acquired Knowledge and Expertise in Platforms Handled high-volume calls in two languages. Coached new hire agents; mentored customer service agents steering them towards company vision and goals in "Average Handle Time" Labs. Trained agents on Landlord Link. Exceeded internal and external customer expectations by taking action to correct quality or service deficiencies; provided solutions for logistical problems and presented work, project flow and efficiency recommendations to management. Created, tracked, and provided enrollment reports to program manager for LAP (Landlord Link Program) Awarded as a Top Ten Performer.

Current Community Affiliations

(The following affiliations are part-time, voluntary, and unremunerated)

- Governor Appointed Trustee, Board of Trustees, Southern Oregon University
- Executive Board President Remake Talent
- Executive Board Member ASANTE Health System
- Chair City of Medford Vision 2040 Task Force
- Rogue Retreat, Community Advisory Council Member
- Coalicion Fortaleza Advisory Council Member
- American Leadership of Oregon Fellow

CARA GRACE GLENNON-OLSEN MPA, PMP

Phone Number: (b) (6)

Email: cara.glennon@gmail.com

SUMMARY

Certified Project Manager with extensive process analysis and people skills. Quick learner and skilled communicator with expertise in status reporting and conveying complex concepts, ideas, and data to non-technical individuals in project management settings. Familiar with multiple project management and process improvement methodologies.

SKILLS

- Meeting Facilitation and Documentation
- Project Controls
- Process/ Workflow Documentation
- Project Management
- PMO Development
- Employee Training
- Status Reporting and Report Development
- Lean and PDSA Models for Improvement
- Organizational Change/ Improvement
- Contract Management

EDUCATION/ CERTIFICATIONS

JUNE 2009 – Master of Public Administration (MPA)

- Portland State University, Portland, Oregon

JUNE 2005 – Bachelor of Science, Philosophy

- Portland State University, Portland, Oregon

CERTIFICATIONS

APRIL 2017 – Project Management Professional (PMP)

- Project Management Institute - certification #2033297

PROFESSIONAL EXPERIENCE

PacifiCorp

Senior Business Specialist, Wildfire Mitigation Program Delivery: 12/2021-present

Technologies Used: MS Office, SAP, Microsoft Project

- Lead a variety of projects and initiatives.
- Track progress against budget for capital projects. Tasks include: project forecasting and reconciliation of cashflow with forecasts.
- Provide additional administrative controls for large capital projects; for example, invoice approvals.
- Capture and track project changes.
- Maintain project documentation.

BLACK & VEATCH CORPORATION

Project Controls Analyst: 11/2018-12/2021

Technologies Used: Procore, EcoSys, MS Office, Adobe Acrobat, Primavera (P6)

- Lead monthly forecast and change management meetings.
- Maintain project forecasts. Capture and track project cost changes.
- Generate program finance and portfolio reports.
- General program quality reporting (on demand).
- Capture and track contract schedule changes.
- Establish performance monitoring for engineering and field work on construction contracts (contract language, templates).
- Led a construction management software rollout from tool configuration through end user support and training.
- Review reports for contractor compliance with reporting standards.

PACIFICORP, VIA YOH STAFFING AND PRECISION SYSTEMS

Project Controls Specialist, Transmission Planning: 05/2017-11/2018

Technologies Used: MS Office, SAP and Primavera (P6)

- Track progress against budget for capital projects. Tasks include: project forecasting and reconciliation of cashflow with cost estimates.
- Provide additional administrative controls for large capital projects; for example, invoice approvals.
- Ensure effective project materials management.

PACIFICORP, VIA YOH STAFFING AND PRECISION SYSTEMS

Project Coordinator, Engineering Design: 05/2016-05/2017

Technologies Used: MS Office, SharePoint, Microsoft InfoPath and SAP

- Designed and implemented SharePoint sites and customized reports for engineering: scope tracking, assignment tracking and design review scheduling.

IBM/ DAIMLER TRUCKS NORTH AMERICA, VIA CDI CORPORATION

Lead PMO Coordinator, IT Infrastructure: 08/2015-02/2016

Technologies Used: Clarity PPM, IBM Program Work Center, MS Office, Adobe Acrobat and SharePoint

- Identified and proactively mitigated the risk of cost overruns for 4 large infrastructure projects with budgets ranging from \$500K to \$6.6M.
- Closed and initiated projects with budgets ranging from \$1.5 to \$3 million dollars.
- Prepared funding requests for large projects with budgets between \$500K and \$6.6M (forecasted labor and resource procurement, gathered budgetary quotes).
- Coordinated customization of IBM Program Work Center to meet reporting needs for large projects at DTNA.
- Developed training materials for project status reporting, conducted training and provided ongoing 1:1 support to project managers during and after the IBM Program Work Center rollout.
- Managed financial reporting for 13 projects, all with budgets over one million dollars.
- Developed a deployment schedule intended to facilitate deployment resource allocation and track approvals.
- Mapped existing project management processes to PMBOK to clarify DTNA project management methodology for new and veteran project managers.
- Built a library of PMI-compliant project documentation templates for project managers (WBS, schedule, etc.).

IBM/ DAIMLER TRUCKS NORTH AMERICA, VIA CDI CORPORATION

Project Coordinator, IT Infrastructure: 05/2013-08/2015

Technologies Used: Clarity PPM, IBM Program Work Center, MS Office, Adobe Acrobat and SharePoint

- Assisted in development of a project demand management process to handle up to 500+ requests per year.
- Developed training materials for the department integration (change) management process.
- Coordinated the change control process for large, complex projects.
- Prepared and conducted training on DTNA's new SAAS tool, IBM Program Work Center, for management of small projects.
- Helped build and maintain project SharePoint sites for project managers.
- Helped audit and control project documentation quality for multiple large projects.
- Designed and published status reports that tracked projects' progress toward meeting quality milestones.
- Wrote work instructions for the application of DTNA's small and large project management methodologies.

Julie Strzempko

(b) (6) jstrzempko@gmail.com

Highly experienced workforce and business development professional with proven strategic business, partnership development and consultative sales experience. Areas of expertise include building partnerships between industry, education, and workforce; collaborating with government agencies, including the Department of Labor; developing quality standards for industry-recognized credentialing; and promoting career pathways. Excels at interpersonal communications, as well as organizing, planning, and prioritizing work and developing objectives and strategies.

EDUCATION

Bachelor of Arts, Economics – Peter T. Paul College of Business and Economics, University of New Hampshire

PROFESSIONAL EXPERIENCE

Center for Energy Workforce Development
Director of Strategic Engagements
Washington D.C, Works Remotely

January 2014-Present

- Director of Strategic Engagements for the Berkshire Hathaway Energy-International Brotherhood of Electrical Workers Stronger Together Program.
 - Attract, engage, retain, and inspire a diverse and inclusive workforce where all individuals are respected, recognized, valued and empowered to fully participate in the skilled trades.
 - Engage management and labor in the energy sector to ascertain current and future workforce educational and training needs and requirements to succeed in entry level positions.
 - Align pre-apprentice and apprenticeship programs with energy industry requirements for qualified pipeline of candidates.
 - Create awareness among community-based organizations, workforce development systems, educational and training programs of the critical need for a diverse energy workforce in the skilled trades.
 - Launched a career navigation pilot with rising seniors at Minority Serving Educational Institutions to increase awareness of energy careers and applications for energy jobs.
 - Designed, developed, and delivered workshops and webinars, especially in the areas of workforce development, capacity building and employer engagement.
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Next Step Living, Boston, MA
Cleantech Company

July 2013-December 2015

Director of Strategic Partnerships

Developed and negotiated customer acquisition opportunities through strategic co-branded partnerships, channels and programs for fastest growing private company in MA 2010-2013. Resulted in revenues that placed company in the top 100 of the Inc. 500 in 2013 & 2014.

Strategic Partnership Development

- Delivered new revenue opportunities by negotiating deals and executing contracts with partners, measuring financial impact, and analyzing fit with company priorities. Strategic partnerships drove 70% of lead generation through focused pipeline development.
 - Identified, prospected, and engaged organizations in the retail, manufacturing, health care, financial, educational, and other key sectors to promote state and federally sponsored residential energy efficiency programs to their customers and employees.
 - Provided innovative marketing, branding, and promotional opportunities to strategic partners.
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Job Corps, U. S. Department of Labor
Region One: New England, New York, New Jersey
Regional New Business & Job Developer

July 2008-April 2013

Developed strategic corporate partnerships with large scale regional and national employers, industry partners, and educational institutions to generate long-term employment opportunities for program graduates, while simultaneously improving regional job placement statistics. Employer partnerships provided graduates with targeted career advancement opportunities.

Workforce Development

- Developed objectives and established long-range goals necessary to ensure job placement initiatives proposed by Regional Director were met and then exceeded. Year two 40% increase, year three 70% increase and year four 97% increase in placement with employers of critical mass.
- Created career opportunities by targeting employer prospects from the following industries: health care, education, construction, automotive, hospitality, culinary, business and security management.
- Aligned employer recruitment efforts with Regional Career Clusters and orchestrated business round table meetings with employers by industry and regional partners.
- Established contact and follow up with employers from various career pathways, schools, college admissions offices, other training programs, and military recruiters to maintain positive relationships and guarantee future referrals.
- Developed and executed Consortium goals by collaborating with internal groups, including 21 Job Corps Centers, corporate representatives, and regional program managers. Gained consensus across multiple stakeholders.
- Collaboratively worked with industry stakeholders to determine certifications and training necessary to prepare graduates to meet industry/employer needs.
- Developed and facilitated “train-the-trainer” workshops enabling staff to coach students on career goals, including researching various industries, interview preparation, common employability skills, personal budgeting, professional etiquette and the role of social media in the interview process.
- Spearheaded Career Preparation Workgroup. Outcome: All Centers worked to establish phases of career readiness that progressively built upon one another establishing criterion which encompasses all components of Career Development Success Standards.

WICN, Worcester, MA, Public Radio, Non-Profit

June 2007 - July 2008

New England Affiliate of National Public Radio

Director of Corporate Development and Marketing

Responsible for planning, implementing, and managing all corporate development and marketing initiatives necessary to achieve WICN's revenue goals.

Business Development

- **Generated 75% of WICN's operating revenue.**
- Developed integrated sales and marketing programs to meet revenue objectives by increasing donor base.
- Cultivated community “centers of influence” and strategic partnerships to develop sustainable revenue streams.

Marketing/Communications

- Implemented and managed integrated marketing and development strategies. Coordinated and managed special events.
- Wrote press releases, media alerts, and creative print/radio ad copy. Cultivated relationship with media.
- Public speaking engagements at industry, educational and hospitality events to raise awareness for station.

Take it Outside, Worcester, MA a Full Service Integrated Marketing Agency

2000 - June 2007

Senior Integrated Sales Marketing Director

Responsible for developing and maintaining key account client relationships.

Program Management.

- Spearheaded and directed three- year integrated marketing campaign for Maryknoll Fathers and Brothers, an international non-profit organization which generated brand recognition amongst a very targeted demographic. Brand recognition increased from 0% to over 32% within a three-year time frame.
- Managed national marketing initiative for Shuttle America, a division of US Airways. Penetrated new demographic markets increasing sales 120% in the first year.

Non-Profit Sponsorship

- Identified sponsors seeking to engage culturally diverse target markets providing a cost-effective vehicle to build awareness amongst this target audience.
- Negotiated three-year Naming sponsorship for the largest African American Festival in the Northeast. Overall sales for event exceeded \$100k. Secured three-year sponsorship of Hispanic Festival for Dunkin Donuts and Comcast.

LANCE CORLEY

(b) (6)

| lance@clejatc.org

Education

- **National Labor College (NLC) – Silver Spring, MD** **2013 – 2014**
Coursework, Bachelor of Arts (see certification below)
- **Crater Lake Training Center – Central Point, OR** **2000**
Test Administrator & Craft Certification Performance Evaluator
- **Kelly Walsh High School – Casper, WY** **1997**

Professional Certifications

- **National Labor College (NLC) – Silver Spring, MD** **2013 – 2014**
Estimating, Project Planning & Scheduling
- **NJATC (National Joint Apprentice & Training Committee) – Bowie, MD** **2014**
Test Administrator & Craft Certification Performance Evaluator
- **NJATC National Training Institute (NTI) – Ann Arbor, MI** **2012**
Course 10 - Principles of Learning,
Course 11 - Elements of Trade Teaching Blended Learning introduction
- **Generac University – Waukesha, WI** **2010**
Warranty and Service Technician for Natural Gas
and Propane Generators Up To 150 K.W
- **Oregon General Journey Electrician License # 22783J** **2006 – Present**

Professional Experience

- **Training Director, Crater Lake Electrical Training Center** **2014 – Present**
Central Point, OR
- **Instructor, Crater Lake Electrical Training Center** **2012 – 2014**
Central Point, OR
- **Journey Inside Electrician, Swanson Electric & J.P. Electric** **2006 – 2007**
Grants Pass, OR
- **Apprentice Inside Electrician, Crater Lake Electrical Training Center** **2001 – 2006**
Central Point, OR

Appointments *(part-time, voluntary, and unremunerated)*

- **Board Member, Rogue Workforce Partnership** **2016 – Present**
Medford, OR
- **Board Member, Crater Lake Electrical Joint Apprenticeship & Training Trust** **2013 – 2014**
Central Point, OR

Jon Flegel

Business Manager/Financial Secretary IBEW LU 659

(b) (6)

jon@ibew659.org

Education

Crater Lake Inside JATC Graduate

LERC U-Lead Graduate

IFEBA Master's Program Graduate

Professional Experience

2021-Current

Business Manager/Financial Secretary IBEW Local Union 659

Responsible for organizing the jurisdiction, promoting friendly relationship with employers, keeping accurate statistics, Permanent member of all negotiating and Trust committees.

Responsible for funds of the local union.

2008-2021

Assistant Business Manager IBEW Local Union 659

Responsible for representing and negotiating individual Collective Bargaining Agreements.

Reports directly to the Business Manager.

1995-2008

Inside Journeyman Electrician

Responsible for the installation of electrical systems

KEVIN OWEN

Contact Information: 3400 W 2100 S, Ste B, Salt Lake City, UT 84119 • kevin.owen@ibew57.com • (b) (6)

PROFESSIONAL EXPERIENCE

Business Manager, IBEW Local Union 57	July 2020 to Present
Journeyman Lineman, Rocky Mountain Power	March 2011 to July 2020
Apprentice Lineman, Rocky Mountain Power	January 2008 to March 2011
Skilled Groundman, Rocky Mountain Power	May 2007 to January 2008
ELM Locator Manager, Blue Stakes of Utah	March 2001 to May 2007

PROFESSIONAL AFFILIATIONS & PUBLICATIONS

- Trustee, Line Construction Benefit Fund
- Trustee, Mountain States Line Constructors JATC
- Trustee, IBEW Western Utilities Health & Welfare Trust Fund
- Trustee, PacifiCorp/IBEW Local 57 Retirement Trust Fund
- Board Member, Utah AFL-CIO

Regents Professor
Distinguished Professor
Research Chair

Department of Electrical and Computer Engineering
Texas A&M University Engineering

PROFESSIONAL INTERESTS:

Electric Power Engineering; Power System Protection, Control, and Computer Automation; Power Systems Failure Diagnostics; Electrical Signal Waveform Analytics; Energy Systems; Fire Detection Technology; Electrical Fire Causation; Forensic Engineering; Engineering Economics; Engineering Ethics, Professionalism and Public Policy

EDUCATION:

- Ph.D., Electrical Engineering, University of Oklahoma, 1975
- M.E., Electrical Engineering, Texas A&M University, 1971
- B.S., Electrical Engineering, Texas A&M University, 1970
- Post Graduate Studies, Theology and History, Abilene Christian University

PROFESSIONAL LICENSES:

- Registered Professional Engineer, Texas #43696, 1978-present
- Registered Professional Engineer, Mississippi #33143, 2022-2023
- Registered Professional Engineer, Alabama #28421-E
- Certified Energy Auditor, Texas

PROFESSIONAL EXPERIENCE:

Administrative

- Associate Vice Chancellor for Engineering Research, Texas A&M University System, 1996-2002
- Deputy Director, Texas Engineering Experiment Station, Texas A&M University System, 1996-2002
- Associate Dean for Research, College of Engineering, Texas A&M University, 1996- 2002
- Associate Vice Chancellor for Engineering Academic Programs, Texas A&M University, 1994-1996
- Executive Associate Dean, College of Engineering, 1994-1996
- Assistant Agency Director, Texas Engineering Experiment Station, 1994-1996
- Assistant Department Head, Electrical Engineering, 1986-1992
- Associate Director, Institute for Ventures in New Technology (INVENT), 1982-1985
- Director, Electric Power Institute, 1980-1981

Educational and Research

- Distinguished Professor, Texas A&M University, 2009-present
- Regents Professor, Texas A&M University System, 2000-present
- Bovay Endowed Chair Professor, 2020-present
- Engineering Research Chair Professor, 2016-2019
- Harry E. Bovay, Jr. Endowed Chair for History and Ethics of Professional Engineering 2008 - 2016
- J. W. Runyon, Jr. '35 Professorship I, 2002- 2008
- Professor, Electrical and Computer Engineering, Texas A&M University, 1988-present
- Director, Power System Automation Laboratory, 1981-present
- Associate Professor, 1979-1988
- Member, Graduate Faculty, Texas A&M University, 1977-present
- Principal Investigator, Electric Power and Power Electronics Institute, 1976-present
- Assistant Professor, 1976-1979
- Instructor, Electrical Engineering, University of Oklahoma, 1973-1975
- Instructor of Physics and Member of Graduate Faculty, Abilene Christian University, 1971-1973
- Graduate Teaching Assistant, Texas A&M University, 1970

Industrial

- President, Power Solutions, Inc., 1988-present
- President and Chief Consultant, Micon Engineering Inc., 1978-1990
- Consultant and Principal, Entek Associates, 1979-1980
- Power Systems Research Manager, Electric Power Research Institute, 1975
- Power Systems Engineer, Oklahoma Gas and Electric Company, 1974 (Summer internship)
- Assistant Government Contracts Property Administrator and Manufacturing Engineering Assistant, Texas Instruments, Inc., Dallas, Texas (Co-op Internship 1967-1970)
- Industrial Consultant/Contractor, 1974-present; Clients include (partial listing):

PROFESSIONAL AND HONOR SOCIETY MEMBERSHIPS:

- National Academy of Inventors (NAI), Fellow, 2015-present
- National Academy of Forensic Engineers (NAFE), Fellow, 2007-present
- National Academy of Engineering (NAE), Member, 1999-present
- The Academy of Medicine, Engineering and Science of Texas (TAMEST) Charter Member, 2004-present
- Institute of Electrical and Electronics Engineers (IEEE), Life Fellow, 1991-present
- IEEE Power Engineering Society (IEEE PES), Member
- National Society of Professional Engineers (NSPE), Fellow, 2004-present
- The Institution of Engineering and Technology (IET), Fellow, 2005
- Texas Society of Professional Engineers (TSPE), 1977-present
- International Council on Large Electric Systems (CIGRÉ)
- American Academy of Forensic Sciences (AAFS)
- American College of Forensic Examiners International (ACFEI), Fellow and Diplomate of the American Board of Forensic Examiners
- National Fire Protection Association (NFPA), Member, 2004-present
- Building Fire Safety Systems Section, Member, 2005-present
- Electrical Section, Member, 2005-present
- Fire Science & Technology Educators Section, Member, 2005-present
- Research Section, Member, 2005-present

CURRENT PROFESSIONAL, PUBLIC AND COMMUNITY SERVICE ACTIVITIES:

(part-time, voluntary, and without remuneration)

- The Academy of Medicine, Engineering and Science of Texas (TAMEST), Charter Member
- National Society of Professional Engineers (NSPE), Member, 1976-present
- Texas Society of Professional Engineers (TSPE), Member, 1976-present
- Institute of Electrical and Electronics Engineers, Inc. (IEEE), Member, IEEE Standards Association
- Power and Energy Society (PES), Member, Substation Committee, 1979-present
- International Council on Large Electric Systems (CIGRÉ), Vice President, U.S. National Committee, 2002-present
- Special Activities, Member, UL 217/UL 268 Task Group on Smoke Detection Technologies
- Member, Compass Bank, Advisory Board
- Member, Camp of the Hills (underprivileged children's camp), Board of Directors
- Member, Opera and Performing Arts Society (OPAS), Board of Directors
- Deacon, A&M Church of Christ

Partial publications list available [here](#)

Prof. Tabitha M. Benney, PhD

Department of Political Science
University of Utah
Salt Lake City, UT 84112

ORCID: 0000-0001-5800-8919

Phone: (b) (6)

Tabitha.benney@poli-sci.utah.edu

EDUCATION

PhD, Political Science, University of California, Santa Barbara (2013)

- Committee: Benjamin Cohen (Chair), Oran Young, Simone Pulver, John Foran
- Subfields: International Political Economy, Environmental Politics, and Research Methods
- Certificates: Global and International Studies and College and University Teaching (CCUT)

MA, Political Science - University of California, Santa Barbara (2011)

MALS, International Affairs - Georgetown University, Washington, DC (2007)

BSFS, Foreign Service - Georgetown University, Washington, DC (2001)

PROFESSIONAL EXPERIENCE: ACADEMIC APPOINTMENTS AND AFFILIATIONS

- Distinguished Teaching Professor, University of Utah (2022-2023)
- Associate Professor, Department of Political Science, University of Utah (2020 - Present)
- Associate Director for Diversity, Equity, and Inclusion, Utah Energy and Power Innovation Center (U-EPIC), University of Utah (2022-present)
- Faculty Fellow, College of Social and Behavioral Science, University of Utah (Fall 2022)
- Affiliated Faculty, Center for Genomic Medicine, University of Utah (2021- Present)
- Affiliated Faculty, Asian Studies Program, University of Utah (2021–Present)
- Visiting Lecturer, Department of Administration and Organizational Science, University of Bergen, Norway (Summer 2019)
- Affiliated Faculty, The Interdisciplinary Exchange for Utah Science (Nexus) Center, University of Utah (2018 - Present)
- Researcher, The Evolving Securities Initiative (ESI), The Griffith Criminology Institute and Global Risk Governance Program, University of Cape Town (2018 – Present)
- Affiliated Faculty, Latin American Studies Program, University of Utah (2016–Present)
- Research Fellow, Earth System Governance (ESG) Network (2016 – Present)
- Affiliated Faculty, Environment and Sustainability Program, University of Utah (2013–Present)
- Affiliated Faculty, Global Change and Sustainability Center, University of Utah (2013–Present)
- Assistant Professor, Department of Political Science, University of Utah (2013 – 2020)
- Jr. Program Officer, Global Affairs, U.S. National Academy of Science (NAS), (2001-2007)

EDITORIAL POSITIONS

- Topics Board Editor, *Atmosphere* (2021-2023)
- Board of Editors, *Cogent Social Sciences* (2015-2017)
- Faculty Editor, *Hinckley Journal of Politics* (2014-2016)

REGULAR REVIEWER: *Atmosphere*, *Energies*, *Energy Policy*, *Global Politics*, Pollutants, Routledge Press, SUNY Press, *Sustainability*, Swiss National Science Foundation, *Vehicles*, *International Journal of Comparative Sociology*, NSF-TIP Panel

PROFESSIONAL AFFILIATIONS

- 3i (Immunology, Inflammation, and Infectious Diseases) Investigator
- American Political Science Association (APSA)
- Earth System Governance (ESG) Network
- Evolving Securities Initiative (ESI)
- GEO Health Community of Practice
- Georgetown University Alumni Association
- Global Change and Sustainability Center (GCSC)
- International Studies Association (ISA)
- National Research Mentoring Network (2022)
- NSPIRES Affiliation (University of Utah)

TEACHING AWARDS AND NOMINATIONS

- Nominee, Robert Foster Cherry Award for Great Teaching, Baylor University (National teaching award) (October 2022)
- Distinguished Teaching Award, University of Utah (2022-2023)
- Finalist, Junior Faculty Teaching Award, University of Utah (2019)
- Nominee, Beacon of Excellence, Center on Teaching and Learning Excellence (2018)
- Finalist, Early Career Teaching Award, University of Utah (2017)
- Wasatch Award for Teaching Sustainability, University of Utah (2015)

Masood Parvania, Ph.D.

Presidential Scholar, Associate Professor, Department of Electrical and Computer Engineering
Associate Chair for Research and Advancement, Department of Electrical and Computer Engineering
Adjunct Associate Professor, School of Computing and Department of Mathematics
Director, Utah Energy and Power Innovation Center ([U-EPIC](#))
Director, Utah Smart Energy Laboratory ([U-Smart](#))
The University of Utah, 50 S. Central Campus Drive, Room 2110, Salt Lake City, UT 84112-9206
Phone: (b) (6) E-mail: masood.parvania@utah.edu

EDUCATION

2013 **Ph.D., Electrical Engineering**, Sharif University of Technology
2009 **M.Sc., Electrical Engineering**, Sharif University of Technology
2007 **B.Sc., Electrical Engineering**, Iran University of Science and Technology

APPOINTMENTS (PROFESSIONAL EXPERIENCE)

2020-Present **The University of Utah**
Associate Professor and Associate Chair, Electrical and Computer Engineering
2015-2020 *Assistant Professor*, Electrical and Computer Engineering
2015 **Arizona State University**
Postdoctoral Scholar, School of Electrical, Computer and Energy Engineering
Center for Trustworthy Cyber Infrastructure for the Power Grid (TCIPG)
2014 **University of California Davis**
Postdoctoral Scholar, Department of Electrical and Computer Engineering
Center for Trustworthy Cyber Infrastructure for the Power Grid (TCIPG)
2012 - 2013 **Illinois Institute of Technology**
Research Associate, Robert W. Galvin Center for Electricity Innovation

RESEARCH PROJECTS (OVER \$15M FEDERAL FUNDING)

- Principal investigator for several projects on grid resilience and security in partnership with PacifiCorp, national laboratories, vendors, and community organizations. The major contributions of the projects include:
 - Developing advanced stochastic optimization and machine learning models for enhancing the cyber-physical resilience of power distribution systems
 - Developing distributed control algorithms for coordinating distributed energy resources to support grid resilience.
 - Developing resilience metrics to assess the impact of automation technologies in restoring service after large-scale outages

SELECT PUBLICATIONS ([Complete List](#))

- [1] J. W. Muhs, **M. Parvania**, M. Shahidehpour, "Wildfire Risk Mitigation: A Paradigm Shift in Power Systems Planning and Operation," *IEEE Open Access Journal of Power and Energy*, vol. 7, pp. 366-375, 2020.
- [2] J. W. Muhs, **M. Parvania**, H. T. Nguyen, J. A. Palmer, "Characterizing Probability of Wildfire Ignition Caused by Power Distribution Lines," *IEEE Transactions on Power Delivery*, vol. 36, no. 6, pp. 3681-3688, 2021.
- [3] A. Umunnakwe, **M. Parvania**, H. Nguyen, J. D. Horel, K. R. Davis, "Data-Driven Spatio-Temporal Analysis of Wildfire Risk to Power Systems Operation," *IET Generation, Transmission & Distribution*, vol.16, no.13, pp. 2531-2546, 2022.

- [4] M. M. Hosseini, **M. Parvania**, “Resilient Operation of Distribution Grids Using Deep Reinforcement Learning,” *IEEE Transactions on Industrial Informatics*, vol. 18, no. 3, pp. 2100-2109, 2022.
- [5] M. M. Hosseini, L. Rodriguez-Garcia, **M. Parvania**, “Hierarchical Combination of Deep Reinforcement Learning and Quadratic Programming for Distribution System Restoration,” *IEEE Transactions on Sustainable Energy*, in press, 2023.
- [6] M. M. Hosseini, **M. Parvania**, “On the Feasibility Guarantees of Deep Reinforcement Learning Solutions for Distribution System Operation,” *IEEE Transactions on Smart Grid*, vol. 14, no. 2, pp. 954-964, March 2023.
- [7] L. Rodriguez-Garcia, M. M. Hosseini, T. M. Mosier, **M. Parvania**, “Resilience Analytics for Interdependent Power and Water Distribution Systems,” *IEEE Transactions on Power Systems*, vol. 37, no. 6, pp. 4244-4257, 2022.
- [8] M. M. Hosseini, **M. Parvania**, “Artificial Intelligence for Resilience Enhancement of Power Distribution Systems,” *The Electricity Journal*, vol. 34, no. 1, pp. 106880, 2021.
- [9] M. Khan, A. Palomino, J. Brugman, J. Giraldo, S. Kasera, **M. Parvania**, “The Cyber-Physical Power System Resilience Testbed: Architecture and Applications,” *IEEE Computer Magazine*, vol. 53, no. 5, pp. 44-54, May 2020.
- [10] M. M. Hosseini, A. Ummunnakwe, T. Tasdizen, **M. Parvania**, “Intelligent Damage Classification and Estimation in Power Distribution Poles Using Unmanned Aerial Vehicles and Convolutional Neural Networks,” *IEEE Transactions on Smart Grid*, vol. 11, no. 4, pp. 3325-3333, July 2020.

LEADERSHIP AND SERVICE IN TECHNICAL COMMUNITY

(the following positions are voluntary, part-time, and without remuneration)

1. Journal Editorial Board Membership
 - 2021-present, Associate Editor, *IEEE Transactions on Power Systems*
 - 2017-present, Associate Editor, *IEEE Power Engineering Letters*
 - 2016-2022, Associate Editor, *IEEE Transactions on Smart Grid*
 - 2020-2022, Associate Editor, *IEEE Transactions on Sustainable Energy*
 - 2018-2022, Associate Editor, *IET Renewable Power Generation*
 - 2015-2016, Guest Editor, *IEEE Transactions on Smart Grid*, Special Issue on Power Grid Resilience
2. Technical Committee Service at the IEEE Power and Energy Society (PES)
 - 2020-Present, Vice Chair, IEEE PES Water-Power Systems Task Force
 - 2020-present, Vice Chair, IEEE PES Task Force on Risk Mitigation in Power Systems
 - 2016-present, Chair, IEEE PES Utah Chapter
 - 2020-2022, Chair, IEEE PES Bulk Power System Operation Subcommittee
 - 2020-2022, Chair, IEEE PES Reliability, Risk and Probability Applications Subcommittee
3. Technical Program Committee Member of International Conferences
 - 2023-Present, Chair, Technical Program Committee, IEEE Innovative Smart Grid Technologies
 - 2022, Co-Chair, Technical Program Committee, IEEE Innovative Smart Grid Technologies
 - 2019-2021, Chair, Publication Committee, IEEE Innovative Smart Grid Technologies
 - 2017-2021, Technical Program Committee Member, IEEE PES General Meeting

Scott B. Capps Email: scapps@atmosdatasolutions.com Voice: (b) (6)

EDUCATION

2009	University of California, Irvine	Earth System Science	Ph.D.
2009	University of California, Irvine	Earth System Science	M.S.
1994	Calif. Polytechnic University, Pomona	Finance	B.S.

PROFESSIONAL EXPERIENCE

Principal and Founder (**August 2015–present**)

Atmospheric Data Solutions, LLC (<http://www.atmosdatasolutions.com/>)

- Design, validate, implement, and support turnkey numerical weather modeling solutions.
- Create physically- and AI-based weather and wildfire fuel moisture forecasts.
- Design, implement and support ensemble-based forecast systems and analytics.
- Create high-resolution, gridded, multi-decadal historical weather datasets.

Senior Science Partner (**Nov 2009–2015**)

Vertum Partners (Dept. of Energy Phase II SBIR/STTR Award Recipient)

- Formulate and implement weather and climate solutions for multiple worldwide clients.
- Support implementation of SAWTI.
- Advise, implement and administer high-performance computing infrastructure.

Assistant Researcher I (**Nov. 2012–Sept. 2013**)/Postdoctoral Researcher (**Nov. 2009–Nov. 2012**)

Dept. of Atmospheric and Oceanic Sciences, University of California, Los Angeles

Advisor: Dr. Alex Hall (<http://www.atmos.ucla.edu/csrl/>)

- Build a regional dynamically-downscaled multidecadal atmospheric dataset for a future climate change study.
- Design, install, optimize and analyze WRF operational and research simulations across various high-performance computer clusters.
- Use WRF to investigate Santa Ana winds and wildfires, wind energy, climate change.
- Projects: SAWTI, LARC, CIEE; Collaborators: SDG&E, UCI, USFS, and JPL.

Graduate Research Assistant (**2004–2009**)

Dept. of Earth System Science, University of California, Irvine Advisor: Dr. Charles S. Zender

- Devised a wind speed discretization method within a Global Circulation Model.
- Evaluated the climate response to sub-gridscale wind speed variability.
- Quantified global ocean wind power at typical wind turbine hub heights using QuikSCAT.
- Assessed global ocean wind power for various wind turbine characteristics and siting depths.

RESEARCH INTERESTS

- Formulating operational mesoscale numerical and AI modeling solutions.
- Building historical high-resolution weather and wildfire fuel moisture data creation.
- Designing and implementing ensemble weather model forecast guidance solutions.

HONORS AND AWARDS

- UCI School of Physical Sciences ARCS Foundation Scholarship Recipient, 2007–2009.
- First Place Poster Presentation Award, AMS Air-Sea Interaction Conference, 2007.
- Outstanding Contributions to the Dept. of Earth System Science, 2006.
- Deans List, University of California, Irvine, 2001.

PEER-REVIEWED JOURNAL ARTICLES

1. Capps, S. B., and C. S. Zender (2008), Observed and CAM3 GCM Sea Surface Wind Speed Distributions: Characterization, Comparison, and Bias Reduction, *J. Climate*, Vol. 21, No. 24, 6569–6585, doi:10.1175/2008JCLI2374.1.
2. Capps, S. B., and C. S. Zender (2009), Global Ocean Wind Power Sensitivity to Surface Layer Stability, *Geophys. Res. Lett.*, 36, L09801, doi:10.1029/2008GL037063.
3. Capps, S. B., and C. S. Zender (2009b), The Estimated Global Ocean Wind Power Potential from QuikSCAT Observations, Accounting for Turbine Characteristics and Siting, *J. Geophys. Res.*, 115, L09102, doi:10.1029/2009JD012679.
4. Berg, N., Hall, A., Capps S. B., and Hughes, M. (2013), El Nino-Southern Oscillation Impacts on Winter Winds over Southern California, *Clim. Dyn.*, DOI: 10.1007/s00382-012-1461-6.
5. Jin Y, JT Randerson, N Faivre, SC Capps, A Hall, and ML Goulden (2014), Contrasting controls on wildland fires in Southern California during periods with and without Santa Ana winds, *J. Geophys. Res.*, 119(3), 432450. DOI: 10.1002/2013JG002541.
6. Capps, S. B. and A. Hall (2014), Sensitivity of Southern California Wind Energy to Turbine Characteristics, *Wind Energy*, 17:141–159, DOI: 10.1002/we.1570.
7. Hsin-Yuan Huang, Scott B. Capps, Shao-Ching Huang and Alex Hall (2015), Down-scaling Near-Surface Wind Over Complex Terrain Using a Physically-Based Statistical Modeling Approach, *Clim. Dyn.*, 44(12): 529542. DOI:10.1007/s00382-014-2137-1.
8. Walton D., F. Sun, A. Hall and Scott B. Capps (2015), A Hybrid Dynamical-Statistical Downscaling Technique, Part I: Development and Validation of the Technique, *J. Climate*, 28(12): 4597–4617. DOI:10.1175/JCLI-D-14-00196.1.
9. Berg, N., A. Hall, F. Sun, Capps, S. B., D. Walton, B. Langenbrunner and D. Neelin (2014), 21st-Century Precipitation Changes over the Los Angeles Region, *J. Climate*, 28(2): 401421. DOI:10.1175/JCLI-D-14-003161.1.
10. Tom Rolinski, Scott B. Capps, Robert G. Fovell, Yang Cao, Brian J. D'Agostino, Steve Vanderburg (2016), The Santa Ana Wildfire Threat Index: Methodology and Operational Implementation, *Wea. Forecasting*, 31, 1881–1897, DOI:10.1175/WAF-D-15-0141.1. <http://dx.doi.org/10.1175/WAF-D-15-0141.1>
11. Rolinski, T., Scott B. Capps, and W. Zhuang, (2019), Santa Ana Winds: A Descriptive Climatology. *Wea. Forecasting*, 34, 257–275, DOI:10.1175/WAF-D-18-0160.1. <https://doi.org/10.1175/WAF-D-18-0160.1>
12. Capps, Scott B., Zhuang, W., Liu, R., Rolinski, T., and Qu, X. (2021), Modelling chamise fuel moisture content across California: a machine learning approach, *Int. J. Wildland Fire* 31, 136-148, DOI:10.1071/WF21061. <https://doi.org/10.1071/WF21061>

WHITE PAPERS

1. Fengpeng Sun, Alex Hall, Daniel Walton, Scott Capps, Katharine Davis Reich (2013), Mid- and End-of-Century Snowfall in the Los Angeles Region, Available online: <http://c-change.la/wp-content/uploads/2013/06/Snowfall-Final-Report.pdf>.
2. Alex Hall, Fengpeng Sun, Daniel Walton, Scott Capps, Xin Qu, Hsin-Yuan Huang, Neil Berg, Alexandre Jousse, Marla Schwartz, Mark Nakamura, Ruth Cerezo-Mota (2013), Mid-century Warming in the Los Angeles Region, Available online: <http://c-change.la/pdf/LARC-web.pdf>.

MEMBERSHIPS

American Meteorological Society (AMS), 2005–present.



Jim Yencer, as an AssurX Professional Services Team Leader, is responsible for specific service-related activities including customer implementations, develop internal configurations and coordinate end-user training.

Responsibilities include providing guidance where applicable to project/coordination engineers, overseeing customer implementations and assist in developing AssurX workflows that align with industry best practices.

EDUCATION/CERTIFICATIONS:

- ❖ Bachelor of Science degree in Electrical Engineering from Rochester Institute of Technology
- ❖ HIPAA Awareness for Business Associates certified
- ❖ HIPAA Security certified
- ❖ Eagle Scout and a former Scoutmaster of a Boy Scout Troop for over 10 years

PROFESSIONAL EXPERIENCE:

- ❖ **Professional Term Services Leader**, AssurX, Morgan Hill, CA 2007 - PRESENT

Key Contributions

- ❖ Experience includes designing and implementing databases, equipment interfaces, legacy systems interfaces, automated equipment control interface software, and business logic.
- ❖ Actively assist in the development of a wide range of solutions for energy & utilities customers
- ❖ Leading customers in the process of developing the best solution based on requirements
- ❖ Development of internal configuration training for out-of-the-box solutions
- ❖ Development of external user training for out-of-the-box solutions
- ❖ Assisting in the development of out-of-the-box solutions
- ❖ Assist Sales with questions and ensuring customer satisfaction
- ❖ Assist with development of statement of work (SOW) documents
- ❖ Performing system integration activities involving enterprise level applications
- ❖ Ensuring that the project is delivered within approved budget, schedule, contingency and that it meets quality standards
- ❖ Providing analysis of system processes and insight.
- ❖ Supporting system enhancement projects, including software development, user testing, re- porting, and troubleshooting.
- ❖ Providing first line of support for Tier 2 & 3 customer issues
- ❖ Technical trainer
- ❖ Possesses over 30 years of experience in information technology

Contact Information

Name	Bryce Yonker
Address	5350 SW 88 th Ave, Portland OR 97225
Email	bmyonker@gmail.com or Bryce@gridforward.org
Phone Number	(b) (6)

Education

Institution	IE
Major	Global MBA
Degree	Masters in Business Administration, 2011

Institution	Pepperdine University
Major	Business Administration, Marketing Minor
Degree	Bachelor of Sciences, 2006

Professional Experience

Employer	Grid Forward – 2014 to Current
Title/Position	CEO and Executive Director
Description	Bryce took on the inaugural role as executive director for Smart Grid Northwest in April of 2014. He lead all strategic and operational initiatives including policy engagement, events, advisory projects, budgeting, staff and leadership development. In 2019 Bryce led the transition of the organization to becoming Grid Forward. The organization is active in supporting the advancement of grid modernization with around 150 members across utilities, technology providers, national labs, education institutions, non-profits and others. He was a founding Board member and active in creating the organization in 2010

Employer	EnerTec Development -- 2017 to Current
Title/Position	Founder and Principal
Description	Launched in October 2017 EnerTec helps energy and technology companies grow and thrive. Consulting and advisory service engagements include Grid Forward, energy technology providers and other industry and non-profit organizations.

Employer	Clean Edge, Inc -- 2011 to 2017
Title/Position	Sr. Director of Business Development and Strategic Partnerships

Description	From 2011 to 2017 Bryce was responsible for bringing research and advisory services to market, including strategic direction, client acquisition, and project delivery. Clients included industry providers, financial organizations, state and regional agencies and non-profits.
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Employer	Software Association of Oregon (now TAO) – 2007 to 2011
Title/Position	VP of Business Development & Membership
Description	From 2007 to 2011 Bryce was the primary revenue generator and developer of strategic initiatives for Oregon's technology trade association. Worked with membership base of about 500 companies including the development of strategic initiatives aligned to advancing clean energy and energy efficiency.

Appointments

Renewable Energy Scholarship Foundation, Board of Directors	Serve in a volunteer, part time capacity for the Board of a regional non-profit organization that issues scholarships for students in studies related to advancing clean energy, 2020 to Current
Children's Cancer Association, Chemo Pal	Serve in a volunteer, part time capacity as a chemo pal for young people who are going through cancer treatment. Have been paired with 3 kids from 2015-2020. Currently on pause after changes to program from COVID
Gravity Power, Advisor	Serve as a part time advisor to the early stage company working to develop long duration energy storage solution. 2020 to current.

Sean Donohue

sean@pano.ai

Contact Information

2701 Orleans St, Bellingham, WA 98226

Cell: (b) (6)

Profile

Senior software developer with experience ranging from hardware design to embedded systems to full-stack web development.

Education

M.E., Electrical Engineering Dec 2017
University of Colorado Boulder, Boulder, CO

B.S., Electrical Engineering May 2011
Rose-Hulman Institute of Technology, Terre Haute, IN

Work Experience

Pano.ai, San Francisco, CA (Bellingham, WA) February 2021 - Present
Actionable intelligence for wildfire management

Embedded Systems Engineer

- Created a custom embedded Linux distribution with Yocto to run remote wildfire cameras, optimizing for high reliability and low-bandwidth connectivity.
- Instrumented remote updates for edge computers using Mender.io.

Storm Peak Engineering, Bellingham, WA

Embedded systems consulting

Owner

June 2019 – February 2021

- Added and maintained packages for a buildroot custom embedded Linux platform.
- Updated Yocto configuration for a new platform for client's next-generation product and fix issues with generated code from meta-tegra.

DeveloperTown, LLC, Indianapolis, IN (Bellingham, WA)

App development, design and devops

Senior Developer

November 2018 – February 2021

- Rebuilt logistics application for client using .NET Core and React to improve user experience, reliability and performance.
- Setup automated application deployments with Docker containers on Azure DevOps.

Malvern Panalytical Ltd, Boulder, CO

Pioneers in the field of Near-Infrared Spectroscopy

Senior Software Engineer

September 2016 – November 2018

- Created a custom embedded Linux distribution with Yocto to work on a multi-product platform for near-infrared (NIR) spectrometers used for ground truthing.

Methode Electronics, Boulder, CO

Develops innovative power electronics products for use in industries ranging from data centers to automotive.

Embedded Systems Engineer

October 2014 – September 2016

- Developed battery management systems for Lithium-Ion batteries. Responsible for hardware and software designs for products ranging from low-voltage (~4V) to high-voltage (200V+) batteries.

Rockwell Collins, Cedar Rapids, IA

Leading defense and aerospace corporation that develops a variety of ground-breaking products for aviation, navigation and communications.

Firmware Engineer II

June 2011 – October 2014

- Used model-based development with Simulink to model critical flight operations for the primary flight computer used in commercial aircraft then generated DO-178C compliant code from models.
- Laid the foundation for a new horizontal stabilizer controller to be used in next-generation aircraft.

EDUCATION

Master of Science, Texas A&M University (1988), Electrical Engineering

Bachelor of Science (summa cum laude), Texas A&M University (1986), Electrical Engineering

PROFESSIONAL EXPERIENCE

2018- Research Professor, Texas A&M University
2021- Principal Research Engineer III, Texas A&M Engineering
2014-2018 Research Associate Professor, Texas A&M University
2008- Assistant Director, Power System Automation Laboratory
1991- Principal Investigator, Texas A&M University
2008-2014 Senior Research Engineer, Texas A&M University
2001-2008 Research Engineer, Texas A&M University
1997-2001 Associate Research Engineer, Texas A&M University
1991-1997 Assistant Research Engineer, Texas A&M University
1990-1991 Senior Research Associate, Electric Power Institute
1988-1990 Research Associate, Electric Power Institute
1987-1988 Graduate Research Assistant, Electric Power Institute

INDUSTRIAL

Vice President, PSI IP Licensing Inc (f/k/a Power Solutions Inc)

President, Power Solutions LLC

RESEARCH MANAGEMENT

“Application of DFA Technology To Chevrans Power Distribution Facilities,” 2021-2023, Chevron USA, \$330,000 with B. Don Russell, et al.

“PacifiCorp: Wildfire Risk Reduction via DFA Technology: Demonstration and Integration Collaboration,” 2020-2022, PacifiCorp, \$610,000 with B. Don Russell, et al.

“Central Electric Cooperative (Oregon): Wildfire Risk Reduction via DFA Technology: Demonstration and Integration Collaboration,” 2020-2022, Central Electric Cooperative, \$430,000 with B. Don Russell, et al.

“Liberty Utilities: Wildfire Risk Reduction via DFA Technology: Demonstration and Integration Collaboration,” 2020-2022, Liberty Utilities, \$455,000 with B. Don Russell, et al.

“Signature Library Framework Development,” UT-Battelle on behalf of Oak Ridge National Laboratory, \$165,000, 2020, with B. Don Russell, et al.

“Improving Distribution System Reliability Using DFA,” 2020-2021, TEES Smart Grid Center, with B. Don Russell and Thomas Overbye.

“Wildfire Risk Reduction via DFA Technology: Demonstration and Integration Collaboration with Southern California Edison,” 2019-2021, Southern California Edison, \$1,345,000, with J. Wischkaemper and K. Manivannan.

“Wildfire Risk Reduction via DFA Technology: Demonstration and Integration Collaboration with Pacific Gas and Electric,” 2019-2021, Pacific Gas and Electric, \$535,000 with B. Don Russell, et al.

“Demonstration and Development of a Business Case for the Use of DFA Technology by TVPPA-Member Electric Cooperatives,” 2019-2021, Tennessee Valley Public Power Association, \$210,000.

“Demonstration of DFA Technology by Dominion Energy,” 2018-2021, Dominion Energy Company, \$190,000, with B. Don Russell.

“Optimizing Operational Use of DFA Data at Pedernales,” 2018-2020, Pedernales Electric Cooperative Inc., \$100,000, with B. Don Russell.

“Event Data Collection For EPRI’s DMD Project,” 2016-2018, Electric Power Research Institute, \$250,000, with B. Don Russell.

“Texas Power Line-Caused Wildfire Mitigation Demonstration,” 2013-2017, Texas A&M Engineering Experiment Station, \$3,000,000, with B. Don Russell.

“Texas Wildfire Mitigation Project Cost Sharing,” 2013-2016, Austin Energy, Pedernales Electric, Bluebonnet Electric, Mid-South Synergy, Sam Houston Electric, Sam Houston Electric, and Concho Valley Electric, \$399,000, with B. Don Russell.

“Ongoing Monitoring, Interaction, and Event Investigation – DFA Arizona Public Service,” 2009-2013, \$296,000, with B. Don Russell.

“Low-Voltage Fault Detection Research Services: Network Instrumentation and Data Collection,” Consolidated Edison Company of New York, Inc, 2008-2013, \$1,350,000, with B. Don Russell.

“Integration and Demonstration of Distribution Fault Anticipation (DFA) Technology at Southern Company,” Electric Power Research Institute, 2011-2012, \$180,000, with B. Don Russell.

“DFA Technology Demonstration for Reliability and Smart-Grid Integration at CenterPoint Energy,” CenterPoint Energy Houston Electric, 2009-2012, \$357,200, with B. Don Russell.

“Investigation of DFA Technology on Transmission Lines at Southern Company Services,” Southern Company Services, Inc., 2010-2011, \$138,100, with B. Don Russell.

“Ongoing Monitoring, Interaction, and Event Investigation – DFA Tennessee Valley Authority,” 2009-2010, \$80,000, with B. Don Russell.

“Ongoing Monitoring, Interaction, and Event Investigation – DFA Southern Company Services,” 2009-2010, \$50,000, with B. Don Russell.

“Comparative Characterization of Parallel Distribution Sensors under Field Conditions,” Power Systems Engineering Research Center (PSERC), 2007-2010, \$150,000, with B. Don Russell and Ward Jewell.

“Low-Voltage Detection Research Services, Task Order No. 1: Initial Problem Study and Definition,” Consolidated Edison Company of New York, Inc., 2006-2007, \$27,000, with B. Don Russell.

“Distribution Fault Anticipation, Phase III: System Integration,” Electric Power Research Institute, 2006-2008, \$720,000, with B. Don Russell.

“Development and Demonstration of Advanced Monitoring Systems for Fault Location, Analysis, and Prediction,” U.S. Department of Energy, 2005-2007, \$100,000, with EPRI Solutions, Inc. and B. Don Russell, and \$450,000 with Power Solutions, Inc.

“Preliminary Examination of Technology for PowerMedia Communications,” PowerMedia Communications, 2005-2006, \$8,000, with B. Don Russell.

“Reliability Based Vegetation Management Through Intelligent System Monitoring,” Power Systems Engineering Research Center (PSERC), 2004-2007, \$109,075, with B. Don Russell, Jim McCalley, and Ward Jewell.

“Increased Electricity Supply through Real-Time Power System Monitoring and Control,” Texas Higher Education Coordinating Board, 2002-2004, \$141,000, with B. Don Russell.

“Distribution Fault Anticipation, Phase II,” Electric Power Research Institute (EPRI), 2001-2005, \$2,397,000 with Karen Butler-Purry and B. Don Russell.

“Detection, Classification, and Location of Faults and Incipient Faults on Electric Power Distribution Systems, Phase I: Proof of Concept,” EPRI, 1997-2002, \$1,314,000

“Smoke Detector Test Agreement,” Fetterly and Gordon, 1999, \$24,000.

“Ongoing Tech Transfer Support of High Impedance Fault Detection Technology,” General Electric Company, 1997-2007, \$66,886, with B. Don Russell.

“Master Agreement for High-Impedance Fault Algorithm Support,” General Electric- Multilin, \$75,000, 1997-2007.

“Distribution Fault Anticipator/Locator Phase I: Proof of Concept,” funded by Electric Power Research Institute, 1997-2001, \$1,308,411, with Karen Butler and B. Don Russell.

“Power Distribution Failure Prediction,” KEYIN Systems (South Korea) and TEES, 1995- 1997, \$81,000 with B. Don Russell.

“Characterization and Detection of Low Current Faults on Low Voltage Networks,” EPRI, 1994-1995, \$150,000.

“Detection Techniques for 480 Volt Network Faults,” Electric Power Research Institute, 1993, Phase II, \$125,000, with B. Don Russell and Michael Aucoin.

“Detection Techniques for 480 Volt Network Faults,” Electric Power Research Institute, 1993, Phase I, \$50,000, with B. Don Russell and Michael Aucoin.

PROFESSIONAL MEMBERSHIPS AND ACTIVITIES (all positions part-time, voluntary, and without remuneration)

Fellow, Institute of Electrical and Electronics Engineers (IEEE) Member,

The International Council on Large Electric Systems (CIGRE)

IEEE Power and Energy Society

IEEE Industry Applications Society

Board of Directors, Texas Municipal Power Agency, 2010-2014, Secretary 2012

Key Referee, *Electric Power Systems Research*

Referee, *IEEE Transactions on Power Delivery* Referee,

IEEE Transactions on Smart Grid

Registered Professional Engineer (Texas), #72170

Partial publications list available [here](#)

Education and Certifications:

1992 – 1996	El Toro High School, Diploma; Lake Forest, CA
January 1998	Cornerstone Systems Specialists; Irvine, CA
Fall 1998	LAN: System Administration (Windows NT Server 4.0), Irvine Valley College, Irvine, CA
September 1999	Certified Help Desk Support Professional, Help Desk 2000; Los Angeles, CA
November 1999	Lotus Notes Advanced Support & Troubleshooting

Professional Experience:**June 2012 – present PSSC Labs, Inc; Lake Forest, CA*****Senior HPC Cluster Engineer***

I am the Senior HPC Cluster Engineer responsible for developing, deploying and supporting high performance computing platforms for both on-premise and cloud deployments. This involves the development of the company's CBeST Cluster Management Toolkit (CBeST) and Parallax Parallel File systems based on various Linux Operating Systems. My expertise in hardware include GPUs from NVIDIA; CPUs from Intel and AMD; storage devices from Western Digital and Micron. As the Senior HPC Cluster Engineer I support the company's largest and most critical accounts across the United States and many different vertical industries. My efforts in supporting these key accounts has been to support and troubleshoot applications in Weather Modeling, Design / Engineering, Artificial Intelligence / Machine Learning and Life Sciences.

April 2005 – May 2012 Advertise.com, Inc; Sherman Oaks, CA***Director of Systems/Network Engineering***

Served as IT staff director, responsible for administering, monitoring, and engineering all aspects of a network of over 200 Linux servers (various distributions) collocated in an off-site data center in Los Angeles; most of which are load balanced using open source software solutions. The servers are mainly used for Internet services such as Web, Email, FTP, DNS, and in-house meta search engine software which handle over 800 million incoming searches per day. During my tenure, I designed a network infrastructure that has seen a 1000% increase in traffic volume with room to grow further. We maintain an uptime greater than 99%. Our data center network runs entirely off of free, open source software with the exception of the search engine software we designed in-house and a mail transport program designed for high volume mailing. Additionally responsible for various other tasks such as managing projects and staff (including hiring), network problem and performance monitoring, reporting as necessary to the CEO.

Operating Systems, Software, and Hardware utilized:

Various Cisco Catalyst 3500 switches, Various models of Intel based servers, Various distributions of Linux including Debian, RHEL, RH Fedora Core, Snap Appliance (NAS device), IPtables, Linux Virtual Server/Keepalived (load balancing software), Nagios, Nginx, Apache, Postfix, Courier, Spamassassin, PowerMTA (high volume mail transport agent), Scalix (groupware platform), VirtualBox, OTRS (trouble ticket system), Cacti (RRD grapher, mainly for bandwidth trend graphing), MS Exchange, Various versions of MS Windows.

July 2003 – April 2005 Prime Internet Network; Tustin, CA***Operations Manager***

I was responsible for managing a team of 7 members that administers and engineers all aspects of a Gigabit Internet network for a large web-hosting company with several high profile customers. Main job duties included, but were not limited to time management and scheduling of staff, project management, planning of network/server upgrades and preventative maintenance, diffusing irate client situations, troubleshooting escalated problems, reporting on network and/or server outages and problems while reporting to the CEO and retaining my previous job duties as a Systems/Network Administrator.

August 2002 – July 2003 Prime Internet Network; Tustin, CA

Systems/Network Administrator

I was responsible for administering and engineering all aspects of a web-hosting network with many high profile websites. This network consists of over 200 servers with an OC-48 Internet connection. Main duties included, monitoring, troubleshooting, administering, securing, and engineering as necessary.

Operating Systems, Software, and Hardware utilized:

Various models of Cisco routers, Cisco, HP, Bay Networks, Foundry Networks, and Dell network switches, Packeteer PacketShapers (traffic shapers), SonicWall Internet Security Appliances (firewalls), Cisco Local Directors (hardware load-balancers), Network Appliance netfilers (Network Attached Storage devices), IBM, Dell, SuperMicro, Compaq, and various other servers. Operating Systems and various other software such as Microsoft Windows 2000, NT 4, Linux distributions such as Debian, RedHat, and Slackware, MS IIS, Apache web server, MRTG and Cricket network bandwidth monitoring software.

December 2001 - August 2002 TransCore; Irvine, CA

Systems Operator

I was responsible for monitoring and troubleshooting a network of approximately 130 Linux/UNIX servers that provide various services for the Foothill, Eastern, and San Juan toll roads in Orange County 24 hours per day. Some of the services on the machines included lane activity monitoring and logging, revenue collection monitoring and logging, and violation enforcement for toll payment evasion. I was additionally responsible for running backups and after-hours Help Desk coverage; all with minimal supervision.

July 2000 - July 2001 GameSpy Industries; Irvine, CA

Systems Administrator

I was responsible for administering, monitoring, troubleshooting, and securing a network of over 100 servers both company-internal and Internet-wide that provided Web, FTP, Mail, RAS, VPN, and File/Print sharing services for thousands of users 24 hrs/day. Additionally, I was responsible for Help Desk and desktop PC support including related software and hardware, and providing reporting and documentation as needed.

Operating Systems, Software, and Hardware utilized:

Microsoft Windows95/98/NT/2000, Microsoft Office (several versions), various distributions of Linux including Redhat and Slackware, Microsoft Exchange Server 5.5, NTMail, Lyris list server, Microsoft IIS 4.0 and 5.0, VPN and NAT servers (using Routing and Remote Access services in Windows 2000 and Ipmasquerading in Linux), Apache Webserver, NFS, SAMBA, MRTG (Multi Router Traffic Grapher) network bandwidth monitoring software, Big Brother network/server monitoring software, various Bay Networks, Intel, Cisco Systems network switches, various models of Dell, Compaq, Intel, VA Linux, and other generic servers.

June 1999 - July 2000 Orange County Register; Santa Ana, CA

Applications Support Analyst (Help Desk)

I was responsible for remote troubleshooting of all telephony and computer problems. Additionally I escalated problem reports, diffused irate client situations, provided reporting and worked with 2nd level subject matter experts to provide resolution to complex problems. I was also responsible for desktop PC hardware and software support. Finally, I prepared documentation and reporting as necessary.

June 1997 - June 1999 Orange County Register; Santa Ana, CA

Computer Operator

I was responsible for the daily operations & support of the following platforms/operating systems: Atex publishing system V4, HP 3000, WindowsNT Server 4.0, WindowsNT Workstation 4.0, Windows95/98, IBM 9672 Mainframe (MVS), DEC/VAX (VMS), and various distributions of UNIX including HP/UX, AIX, Solaris, SunOS, and SCO.

Charles Carroll

Engineering Manager I –SEL Cyber Services

Charles Carroll is a network and security engineer with more than 20 years of experience in diverse technological disciplines. Charles has acquired extensive knowledge in cybersecurity, network security, and network design.

Education

BS Information Technology and Cybersecurity, King University, 2017

BS Electronic Engineering Technology, ITT Technical Institute, 2000

Certifications

ISC2 CISSP

Member ID: 717410 GIAC

GDSA GSEC

GCIH GRID SSAP

Member ID: 21090405

Cisco

CCNA, Routing and Switching CCENT

Member ID: CSC013259347

CompTIA

Certified IT Operations Specialist Certified Secure Infrastructure Specialist Security+

Network+ A+

Member ID: COMP001021235825

Professional Experience

SEL Engineering Services, Inc. (SEL ES), subsidiary of Schweitzer Engineering Laboratories, Inc.

Charlotte, North Carolina, 2018–Present

Charles is an engineering manager within the Secure Solutions department. He has a detailed knowledge of cybersecurity policies, procedures, and standards. He is experienced in implementing technical security controls and IT services. He also is experienced in both wide- and local-area networking.

Schweitzer Engineering Laboratories, Inc. (SEL) Charlotte, North Carolina, 2016–2018

Charles joined SEL as an intern in the information services division where he provided both end-user and network infrastructure support. His responsibilities included:

- Troubleshooting and resolving end user computer and network issues.
- Maintaining accurate systems documentation.
- Configuring and deploying network infrastructure devices.
- Maintaining and updating information systems infrastructure.

Carroll Engineering Company Harlan, Kentucky, 2004–2016

As lead electronics engineer, Charles provided electronic expertise to the mining industry and supported the equipment of numerous manufactures. In addition, Charles obtained multiple vendor certifications while in this role. His responsibilities included:

- Analyzing and repairing electronic safety, communication, and process control equipment to printed circuit component levels.
- Supervising repair technicians in quality and safety practices.
- Maintaining the highest level of efficiency and quality.
- Corresponding with customers to develop solutions to ensure compliance with state and federal governmental standards.

Elite Auto and Truck Center Knoxville, Tennessee, 1996–2004

As the shop foreman and lead technician, Charles managed the day-to-day operations of the repair shop and provided technologically advanced diagnostic and repair services. In addition, Charles obtained ASE Master Auto Technician and Advance Engine Performance certifications. His responsibilities included:

- Managing the day-to-day operations of the repair facility.
- Performing electronic troubleshooting and engine analytical services.

Alejandro Carbajal, PE

Project Engineer III – Automation – SEL Engineering Services

Overview

Education BS Electronics Engineering, Universidad Autónoma de San Luis Potosí, 2008
Experience 12 years

Engineering Expertise

Alejandro Carbajal is an electronic engineer with over 12 years of experience in designing and testing automation systems. Alejandro has experience designing, simulating, testing, and commissioning SCADA systems for monitoring and control processes. He has extensive knowledge in communication protocols such as DNP3, SEL Protocol, and Modbus along with expertise in IEC 61850 and standard protocols such as MMS and GOOSE. In addition, he has experience in communication networks, CODESYS, and programming with the IEC 61131-3 standard. Alejandro has experience developing and configuring several HMI softwares such as zenon, Survalent, ACSELERATOR Diagram Builder™ SEL-5035 Software, and Clearview.

Relevant Experience

Remedial Action Scheme for Mine

Alejandro participated in the development of a remedial action scheme (RAS) for a mine in Peru. The RAS system was acting over the loads in the mine depending on the behavior of the electrical system. This was an angle difference-based project that was monitoring several points of the electrical system around the country and acting based on the gathered information. The system was implemented using C37.118 synchrophasors protocol with an SEL-3378 Synchrophasor Vector Processor (SVP) acting as main controller hardware. An SEL-451 Protection, Automation, and Bay Control System acted as a phasor measurement unit (PMU) and an SEL-2240 Axion® acted as a load-shedding device.

Remedial Action Scheme for Utility

Alejandro participated in the design, testing, and validation of an upgrade to an existing RAS. The upgrade involved integrating a new wind generation to the RAS scheme along with the existing thermal generation. The project also involved updating the existing unit selection logic for tripping generators, crosspoint changes, and HMI updates.

Fault Recorder and Synchrophasor System for Monitoring

Alejandro was the technical lead for this project, which involved a system of 14 substations that were collecting C37.118 synchrophasor data from several PMU devices that were connected to strategic lines around the electrical system. The project also involved dynamic disturbance recorder (DDR) and event collection from the same devices. The main equipment for this project were the SEL-3555 Real-time Automation Controllers (RTAC), which act as phasor data collectors, and around 50 relays/meters acting as PMUs.

Best Selection Automatic Generation Trip Algorithm

Alejandro developed an algorithm based on IEC 61313-3 that uses RTACs as a platform. The algorithm was designed for wind farms where there are several circuits of generation, each circuit with a significant number of wind turbines. Under contingency circumstances are required by the national regulator of energy in Mexico to shed certain amounts of generation. The algorithm selects the right amount of generation to trip based on a set point provided by the national regulator of energy and selects the right circuits for achieving this generation release. The algorithm has been helping many private energy providers to comply with the national regulations, and it is active in around 14 wind farms in Mexico.

Employment

2019–present SEL Engineering Services, Inc. (SEL ES), Boise, Idaho
2011–2018 Schweitzer Engineering Laboratories, Inc. San Luis Potosí, México
2009–2011 Schweitzer Engineering Laboratories, Inc., Development Engineer in Rotation Program

BIDESH KAR

(b) (6)

• bideshkar@gmail.com

PROFILE

Product Management leader with experience taking multiple products encompassing hardware, communications, software, and analytics from concept to launch for a global customer base.

Key responsibilities:

- Product Portfolio Vision
- Multi-year Business Plan
- Innovation Pipeline Review
- Pricing Design
- Market Trend Analysis
- Strategic Alliances
- Voice of Customer
- Sales Enablement
- Outbound Marketing

EDUCATION

DUKE UNIVERSITY, The Fuqua School of Business, Durham, NC

- *Master of Business Administration (Weekend Executive)*, May 2014

KALYANI UNIVERSITY, Kolkata, India

- *Bachelor of Technology, Computer Science/Information Technology*, August 2003

PROFESSIONAL EXPERIENCE

Director of Product Management @ Sentient Energy, Burlingame, CA (Apr 2019 – Current)

Sentient Energy a Koch Engineered Solutions company leads the market for monitoring electricity grid. With a suite of sensors that are retrofittable into legacy equipment as well as compatible with contemporary, Utilities can now have full visibility of their system to optimize operations and ensure reliable and safe power delivery.

In my role at Sentient Energy, I own all products and solutions related to monitoring and analytics for underground electricity distribution segment including their P&L. The portfolio comprises of three product lines with variants for multiple geographic regions. The solution caters to both On-Premises and Cloud software deployments as well as integration into data lake platforms.

- Led launch of multiple productsⁱ within 24 months by adopting a platform strategy and repeatable design
- Helped leadership build product management from ground up and hired/mentored new team members
- Devised framework and structure for multi-year product roadmap to align goals, initiatives, and roadmap
- Improved traceability of requirements by transitioning the organization from excel based requirements management to an off the shelf product management platform
- Partnered with Sales, Business Development, and Customer Success leadership to introduce products into new markets and segments across geographies
- Designed offering structure for "As a Service" model supported by market sizing and financial analysis
- Reduced COGS by 20% working with engineering & manufacturing on multiple cost reduction initiatives
- Increased product portfolio awareness by conducting webinars, speaker sessions at partner events, and demonstrations at multiple tradeshows at a global level in collaboration with corporate marketing
- Led Tradeshow activities for product launch such as booth plan/setup, demo, messaging, collateral design
- Built innovation pipeline to drive future vision of products and perform groundwork for future growth

Product Manager @ S&C Electric Company, Alameda, CA (May 2016 - Feb 2019)

S&C is a leading manufacturer of electrical equipment with embedded electronics and communication devices for both Utilities and Commercial and Industrial businesses.

In my role at S&C Electric Company I owned the lifecycle of multiple products from concept to market.

- Guided and assisted marketing communications, creative services, and sales enablement groups to ensure successful product launches and trade shows
- Defined market sizing and segmentation for new product ideas in collaboration with other product managers and validated with sales leadership to accordingly drive business cases
- Prepared multi-year product roadmap, strategy, and business plan in alignment with other business units for presenting to C-level executives and subsequently for evaluation by Board members
- Collaborated with leaders from manufacturing, sales, hardware, electronics, and telecommunications to solicit feedback for product roadmap that is aligned across groups and with corporate strategy
- Stewarded internship programs consisting of 20+ interns managed by two leads annually to experiment latest technologies that were then fed into innovation pipeline

Multiple Roles @ ITRON INC., Oakland, CA (2008-2016)

Itron is a market leader in software and hardware solutions for Utilities worldwide

At Itron throughout my tenure, I have served in a variety of roles - Technical Product Manager, Solution Architect, and Project Manager. I have led teams of up to 12 consultants as part of implementation projects.

Technical Product Manager & Solution Architect, 2013-2016

- Built software products (Desktop and API) generating \$15M+ over 3 yrs. in licensing and services
- Developed strategic partnering relationship with SAP to deliver “MDUS” - a joint solution that is an out of the box integration between SAP’s ERP system and Itron’s Meter Data Management System

Project Manager, 2008-2012

- Supervised team of 10 engineers located worldwide (India, Europe, and US) and managed multiple projects accounting for \$6M+ in annual revenue

Multiple Roles @ INFOSYS TECHNOLOGIES LTD., India, and US (2003 – 2008)

Infosys is a global software service provider

At Infosys I started my career as a software engineer performing hands on programming and testing. Demonstrating my leadership abilities, I earned the role of a Project Manager to lead projects at our client Itron.

Project Manager, 2006-2008

- Mentored software product team of ten in India on Microsoft technologies to design web-based energy forecasting product for Itron Inc.; hired by client for strong project management expertise
- Analyzed change management process and recommended modifications with net savings of \$80K/yr.

Software Engineer, 2003-2006

- Awarded “Performer of the Quarter” out of 300 employees for leading and completing a proof of concept two weeks ahead of schedule. The PoC helped secure a \$8M deal for the actual project

ⁱ <https://www.sentientenergy.com/press/sentient-energy-shapes-the-market-for-underground-line-sensors-announces-industry-first-technology-advancements-and-customer-adoption/>

JASON R. ZUMSTEIN

(b) (6) – jason@pisgahrad.com

SENIOR PROJECT MANAGER

17 years of progressive engineering design, analysis and project management experience in product development. Proven ability to produce results by owning initiatives and using applied analytics.

SKILLS / CREDENTIALS

- | | | |
|--------------------------------|--------------------------|-----------------------------|
| ○ Project Management (7 years) | ○ Agile Workflow / Jira | ○ Product Development |
| ○ Subcontractor Management | ○ Microsoft Project | ○ Electro/Mechanical Design |
| ○ Systems Engineering | ○ Requirements Documents | ○ Data Acquisition/Analysis |
| ○ EVMS (Earned Value) | ○ CDRL Management | ○ Simulation Analysis |

EDUCATION

Master of Science in Aerospace Engineering

Georgia Institute of Technology – Sept. 1998 – May 2000

Bachelor of Science in Aerospace Engineering

North Carolina State University – Aug. 1994 – May 1998

WORK HISTORY

Senior Project Manager

Technosylva – September 2021 – Present

- Lead cross functional Agile teams in requirements analysis, design, implementation, testing, and deployment of technical solutions on a variety of engineering and technology projects
- Developed scopes of work with detailed cost estimates
- Monitored and managed multiple project budgets, including preparing billing documentation and invoicing clients

Principal Engineer/Project Manager

Nishati Inc. - September 2019 – September 2021

- Wrote technical RFI/RFP, requirements and SOW documents
- Provided mechanical design, structural FEA, SolidWorks modeling and production drawing expertise for composite structures, expeditionary solar panels, solar panel transport cases, solar panel racking systems and next generation diesel generator concepts for use by the DoD

Lead Designer/Project Manager

Barbaricum Ilc - Nov 2017 – Jan 2019

- Led a cross functional Agile team in the design, modeling and simulation, FEA, fabrication, documentation (ICDs, TDPs), pressure testing and field testing of a \$6M marine vehicle R&D project for DoD

Sr. Systems Engineer

Barbaricum - Sept 2015- Oct 2017

- Developed Systems Engineering Plan (SEP) and budgeting for \$6M marine vehicle project
- Maintained documentation, managed purchasing, approved supplier invoices, drafted proposals, created briefings
- Reported earned value (EVMS) to client monthly
- Flight test engineer for abbreviated Analysis of Alternatives evaluation of eight light-sport aircraft for Army customer