Hana Baesmat

Draper, UT
-Email me on Indeed: http://www.indeed.com/r/Hana-Baesmat/e2d68d6274ae463c

A highly motivated technical principal with a demonstrated leadership history, and a passion to establish programs, and continuously improve and contribute to the success of projects and organizations. Adept at conducting research, modelling, and converting simulation models to experiments in lab environments. Specializes in electrical systems design, roadmap planning, and risk mitigation.

Work Experience

Sr. Manager, Electrical Engineering Program Management

AMAZON, RELIABILITY MAINTENANCE ENGINEERING (RME)
January 2021 to Present

Providing electrical engineering support to Amazon sites across North America
Providing continuous operational support to the Amazon sites for emergent events
Partnering with the global design team to improve Amazon's design practices and criteria
Establishing an electrical engineering program across North America addressing electrical safety, asset management, design and specifications, operations and maintenance, and critical risk management
o Updating the North American Electrical Safety procedure
o Correcting design deficiencies based on lessons learned and bench-testing of systems
o Establishing a spare parts management program
o Establishing an electrical Preventative Maintenance program
o Establishing a hands-on training program for Amazon's Qualified Electrical Workers (QEW)
o Developing the North American Electrical Systems Playbook
Setting team strategy and goals
Headcount management, and growing the electrical team to provide satisfactory coverage of the North American sites

Principal Electrical Engineer

RIO TINTO - South Jordan, UT
May 2019 to January 2021

Managing electrical engineering projects:
o High current rectifier and harmonic filter/capacitor bank upgrades for an electro-winning application
o 13.8 kV switchgear replacement at Tailings
o 44kV distribution line re-conductoring and circuit breaker upgrades
o Site-wide electromechanical to microprocessor-based relay (Schweitzer relays) upgrades
o Site-wide deployment of SEL-RTAC distribution automation controller
Developing the electrical systems roadmap aligned with the business production goals
o Developing the 5-year roadmap of the electrical systems team to strengthen the power delivery infrastructure, improve the quality of engineering, increase system efficiency and to prepare for the fourth industrial revolution, and grid modernization
Developing equipment standards and health criteria

o Developing standards for VFDs, low voltage Motor Control Centers (MCC), medium voltage switchgears, relays and metering
o Developing equipment health criteria for power system components
o Deploying inspections for power systems critical components in the iAuditor and APM platforms
o Developing the site-wide electrical testing program
Providing technical discipline support to major capital projects
Providing direction and mentorship to the Kennecott electrical engineers
Electrical system design and modeling
o System modeling and studies in ETAP, SKM, and DIgSILENT PowerFactory
Conducting technical risk assessments
o Criticality assessment of system components
o Determining equipment testing frequencies based on risk assessments
Managing the Electrical Systems Graduate Engineering program and SCADA team
Attending Factory Acceptance Tests (FAT) for switchgears, MCCs, transformers, VFDs, etc.
o Developing equipment specific checklists for FATs

Senior Electrical Engineer

RIO TINTO - South Jordan, UT
December 2015 to May 2019

Assessing feasibility and soundness of engineering solutions, equipment, and processes
Optimizing existing assets and applying complex problem solving techniques
Conducting RCAs on electrical systems failures
o Performing RCAs on the electrical systems failures and implementing the findings to prevent any future reoccurrences
Developing auditing tools for equipment data collection
o Developing an online smart data collection tool to collect data on system components to be used in power system studies
Implementing the substation inspection program
o Deploying an online tool for inspection of critical substations
o Trending critical parameters of system components
Developing equipment specific maintenance procedures, equipment specification, and standard working instructions
Conducting load flow, short circuit analysis, protection and coordination, motor transient, and arc flash hazard analysis, and EMT studies
Managing the Electrical Systems Graduate Engineering program
Programming in RSLogix5000

Electrical Engineer

RIO TINTO KENNECOT - South Jordan, UT
October 2012 to November 2015

Providing expertise, technical support, reviews, input and technical direction for sustaining capital and expansion projects
Reliability of the power distribution system
o Designating component redundancies based on criticality assessments
o Using historic data to predict component failures
o Reviewing transformer oil DGA results
Troubleshooting and resolution of ongoing electrical system issues
Participates in energy reduction, conservation, and greenhouse gas reduction efforts

o Peak shaving
o Site wide power factor improvements
o Specifying adjustable speed drives where appropriate
o Reducing power system losses by altering operating procedures, and appropriate design of systems and components
Conducting and analyzing power quality studies
o Conducting PQ studies using the portable ELSPEC PQ meters and analyzing recorded data
o Providing technical recommendations based on finding

Graduate Research Assistant
UNIVERSITY OF UTAH - Salt Lake City, UT
May 2012 to September 2012

Conducting research on Injectable Wireless Electrode Arrays For Neural Prosthetics

Manager, Research Department
KURDISTAN ELECTRICAL POWER DISTRIBUTION COMPANY - SANANDAJ, IR
February 2009 to October 2011

Selecting the best and most efficient research projects proposed by contractors
Conducting research projects related to Electrical Power Distribution Systems
Managing research projects through completion

Electrical Design Engineer
KURDISTAN ELECTRICAL POWER DISTRIBUTION COMPANY - SANANDAJ, IR
September 2007 to February 2009

Technical and Economic planning of Electrical Power Distribution Systems
o Design of low voltage power distribution systems including lines, transformers, protection devices, capacitors, etc.
Launching the Power Distribution Equipment Monitoring Software

Education

Doctorate in Electrical Engineering
UNIVERSITY OF UTAH - Salt Lake City, UT
December 2019

Master's certificate in Project Management
GEORGE WASHINGTON UNIVERSITY - Washington, DC
November 2015

Master in Electrical Engineering
UNIVERSITY OF KURDISTAN
February 2010

Bachelor in Electrical Engineering
UNIVERSITY OF KURDISTAN
February 2007

Skills

- Self-motivated
- Flexible
- Team player
- Problem solving
- Converting simulation models to experiments in a lab environment
- Optimization
- Machine learning
- Knowledge of MSHA/OSHA requirements
- Schweitzer relays
- RSLogix5000
- FAA certified drone pilot
- Root Cause Analysis
- ACES Lean Six Sigma
- Expert in MATLAB/SIMULINK/SIMSCAPE
- SKM
- AIMMS
- DIgSILENT PowerFactory
- PSCAD
- SynchroWAVe Event
- MS Office
- LaTeX
- AutoCAD
- Knowledge of IEEE
- FERC
- NERC
- NEC
- NFPA70E
- NFPA 70B
- NETA MTS standards

Certifications and Licenses

Certified Project Manager