

EDUCATION

2007 **Bachelor of Science in Electrical Engineering**
New Mexico State University, Las Cruces, New Mexico

EXPERIENCE

July 2018
to Present **Engineering Design & Testing Corp.**
Concord, California

Regional Manager (2024 to present)
District Engineering Manager (2021-2023)
Consulting Engineer (2018-2021)

Specialized consulting in electrical engineering for residential, commercial, and industrial systems, including origin and root cause analysis of electrical system and battery failures, fires, explosions, arc flash incidents, electrical injuries, and code compliance. Technical investigations of incidents involving commercial and industrial power, automation, and control systems. Analysis of project management, scope of damage, and costs to repair or replace electrical equipment and systems.

May 2016
to July 2018 **San Francisco Public Works**
San Francisco, California

Electrical Engineering Group Lead

Managed a full-service design group of engineers and drafters focused on the design and construction of industrial power and automation systems. Work included supervision and training of junior engineers, resource and budget management, and client customer service.

Functions included serving as the electrical, instrumentation, and automation discipline lead on large capital projects, and serving as a lead Project Engineer overseeing multidisciplinary design teams. Work included all aspects of project engineering, from conceptual planning through commissioning, including cost estimating, construction scheduling, detailed design, bid evaluation, construction support, and commissioning.

April 2009
to May 2016 **San Francisco Public Utilities Commission**
San Francisco, California

Associate Electrical Engineer

Engineering design lead for power, automation, instrumentation & control systems for Wastewater treatment facilities, pump stations, and collection systems. Design, analysis, and modification of SCADA, DCS, PLC/HMI systems. Developed and analyzed control strategies and algorithms. Designed power distribution, motor control, lighting, protection, and safety systems for capital construction projects, process retrofit projects, and energy efficiency improvements.

May 2007
to April 2009

Lotus Consulting Group
Los Altos, California

Energy Analyst

Created, updated, and simulated computer models of the power grid and power market participants. Analyzed data created by simulation of these models for clients, including analyzing economic impacts of power grid congestion, fluctuations in fuel prices (coal, natural gas, etc.), and the grid impact of the large wind and solar power assets. Compiled this data into reports for clients and to benchmark and check accuracy of the computer models against real-time data from the various independent system operators (ISO's) of the US power grid.

REGISTRATIONS and CERTIFICATIONS

Registered Professional Engineer in Arizona (#67760)
Registered Professional Engineer in California (#E 20081)
Registered Professional Engineer in Colorado (#0054987)
Registered Professional Engineer in Idaho (#P-18134)
Registered Professional Engineer in Michigan (#6201311990)
Registered Professional Engineer in Montana (#59437)
Registered Professional Engineer in Nevada (#026049)
Registered Professional Engineer in New Mexico (#25289)
Registered Professional Engineer in New York (#109460)
Registered Professional Engineer in North Carolina (#057798)
Registered Professional Engineer in Oregon (#94305)
Registered Professional Engineer in Texas (#132792)
Registered Professional Engineer in Utah (#10970319-2202)
Registered Professional Engineer in Washington (#56706)
Registered Professional Engineer in Wyoming (#16985)

Certified Automation Professional – International Society of Automation (#101959) (2019-2025)

Certified Fire and Explosion Investigator – NAFI (#23597-13983)

PROFESSIONAL ORGANIZATIONS

International Association of Arson Investigators (IAAI)
International Society of Automation (ISA)
National Association of Fire Investigators (NAFI)
National Fire Protection Association (NFPA)