

MICHAEL LEGGIO

Huntington, NY | (631) 871-2582 | MichaelLeggio94@gmail.com

WORK EXPERIENCE

X-energy

Rockville, MD (Remote)

System Engineer, Instrumentation & Control

Dec 2021 - Nov 2023

- Led system design for plant-wide I&C system in Xe-100 HTGR Gen. IV nuclear power plant.
- Defined system requirements, functions, SDD, system architecture, system interfaces, risks, and baselines for maintenance & diagnostic I&C system using MBSE.
- Created the sole integrated diagram of all energy conversion mechanical and I&C systems by facilitating cross-disciplinary reviews throughout the organization.
- Identified all monitored plant equipment by hosting workshops with nuclear, mechanical, I&C, electrical, data analytics, maintenance, and cybersecurity system engineers.
- Reviewed process P&IDs and technical documents to identify gaps and ensure design maturity.
- Implemented dynamic team data visuals in Power BI to track project status for management.
- Continuously improved team processes and design processes that include work planning, work scheduling, supplier oversight, configuration management, team reporting, and procurement.

Cardinal Control Systems

Holbrook, NY

Systems Integration Lead

Jan 2019 - Dec 2021

- Directed Building Management System projects from specification to installation by creating submittals, programming controllers, and leading technicians.
- Determined mechanical and I&C equipment to meet project requirements within budget.
- Trained junior engineers, end user customers, and installers in building automation.
- Coordinated with contractors during periods of conflict to ensure efficient project completion.

Controls Design Engineer

Nov 2016 - Jan 2019

- Created PLC termination diagrams and ductwork instrument diagrams for installation.
- Produced system architecture diagrams and communication wiring for commercial buildings.
- Designed intuitive HMIs for non-technical staff to manage building equipment.
- Installed, commissioned, and troubleshoot supervisory controllers and remote PLCs.

SKILLS & PROFICIENCIES

Technical Writing, Project Management, System Design, I&C, Smart Plant, AutoCAD, P&ID, PTC Creo, Solid Edge, Navisworks, MBSE, Primavera P6, DCS, DDC, PLC, Commissioning Microsoft Office, Excel, Powerpoint, Project, Access, Power BI, Teams, Outlook

EDUCATION

Binghamton University

Bachelor of Science in Mechanical Engineering

Binghamton, NY

Minor in Sustainability Engineering