

Skills Summary: Engineer and Project Manager

Engineer-in-Training (EIT), experienced in HVAC systems, predictive analytics, energy technologies, and cross-functional engineering, primarily in government, healthcare, construction, and utility sectors.

Key Achievements

- Designed Predictive Analytics Dashboard for the **US Coast Guard**.
- Created a Priority Meter Automation Script for **Con Edison**.
- Invented "BioCharge," a wearable device converting walking motion into energy to charge an iPhone.

Core Skills

MEP System Designs, Stress Load Simulations, Creo, SolidWorks, Soldering, PLC, Python, Revit, Tableau, Java, C++, AutoCAD, Autodesk, Adobe Photoshop, Adobe Illustrator, Stakeholder Presentations, MS Office (Word, Excel, PowerPoint)

Education

BACHELOR OF ENGINEERING (B.ENG.), MECHANICAL ENGINEERING; MINOR IN COMPUTER SCIENCE

Stevens Institute of Technology

CERTIFICATION, ENGINEER-IN-TRAINING (EIT)

National Council of Examiners for Engineering and Surveying

Professional Experience

INDEPENDENT ENGINEERING PROJECTS2023 - Present

- Combined planning and execution skills to design a mobile HVAC refrigeration device that cools large amounts of drinking water, applying thermal engineering principles and energy heat transfer calculations. Wrote the design specifications, performed feasibility analysis, and built through soldering, pipe cutting, electrical wiring and pumping refrigerant to determine functionality.
- Conceptualized "BioCharge," a wearable biomechanical energy harvesting device that converts walking movement into energy that can charge an iPhone. Used SolidWorks and AutoCAD to optimize; redesigning prototypes for launch.

PRODUCT ENGINEERING INTERN – MEDTRONIC, GLOBAL SURGICAL INNOVATIONS DEPARTMENT; Boulder, CO2021

- Created 3 training documents improving electrosurgery patient outcome for over 100 million surgical procedures worldwide.
- Partnered with R&D Department to create 3 new design initiatives for pre-product development; Interviewed 10 surgeons and nurses in a double-blinded study to incorporate user feedback into future designs.

RESEARCH INTERN – MARITIME SECURITY CENTER (DHS CENTER OF EXCELLENCE); Hoboken, NJ2020

- Developed Tableau-based predictive analytics Risk Management Dashboard for the US Coast Guard.
- Used Python to analyze 10 years of US Coast Guard incident data, better allocating 40,000+ active personnel and reducing incident surges; Successfully presented outcomes for U.S. Coast Guard stakeholders, who adopted it for field use.

TEMPORARY ENGINEERING AIDE – CON EDISON (AMI PROJECT); New York, NY2019

- Conducted design review processes and acted as on-call duty responder, supported power plant operations.
- Scripted a data-driven automation algorithm to identify and flag over 10,000 priority meter banks, better supporting Con Edison technicians.
- Tracked, analyzed, and evaluated energy meter remediation and power progress through New Business and Business as Usual reports.

- Conducted safety checks to ensure public safety, assisted in assembling scaffolds and transporting materials to complete 10-story building façade renovation, and documented influx of construction materials to monitor budget and maximize cost efficiency.