CAITLIN MCMAHON

60 Westwood Drive, Massena, NY, 13662 • (315) 600-1444 • mcmahonc@union.edu

EDUCATION

Union College, Schenectady, NY
Bachelor of Science in ***Electrical Engineering***, Minor in Mathematics *June 2020*
GPA: 3.95, Scholars Program
Term Abroad: York, England, *Fall 2018*

RELEVANT EXPERIENCE

***Grid Modernization Intern*, National Grid,** Albany, NY *June 2019-Present*

- Utilize PI Datalink and excel to extract feeder performance data and create load profile curves to improve Advanced Distribution Management System (ADMS) application
- Collaborate cross-functionally to determine requirements for the ADMS upgrade
- Perform feeder scrubbing by troubleshooting faults under worst case conditions in Operations Management System
- Coordinate fuse sizing according to standards and load analysis on CYME software
- Investigate various reclosers' supervisory capabilities using GIS in order to determine available hosting capacity for distributed generation without significant cost upgrades

***Developmental Intern,* New York Power Authority,** Massena, NY *June 2017-August 2018*

- Managed multiple electrical engineering and instrumentation and controls (I&C) projects through: design, procurement, interdepartamental scheduling, print management, regulatory review, field implementation oversight
- Enhanced Maximo's usability by adding identification, spare parts and manuals for inventory
- Presented Dissolved Gas Analysis results and action plan to all departments

RESEARCH EXPERIENCE

Union College, Schenectady, NY

***Capstone Student*,** Electrical Engineering Department, Professor Dosiek *March 2019-Present*

- Optimize Union College's microgrid energy mix and capabilities to meet all internal load while minimizing cost and maximizing sustainability under various scenarios on MATLAB

***Researcher*,** Electrical Engineering Department, Professor Pappu *September 2017-June 2019*

- Used MATLAB simulations to transmit chaotic signals through ground penetrating radar and apply signal processing on the received signal to interpret the materials below ground

Lab Assistant, Electrical Engineering Department, Professor Traver *January-March 2019*

- Helped students debug C code on MPLAB IDE for practical applications such as analog to digital conversion, temperature sensing, password entry, controlling motor speed

Scholars Program Researcher, Professor Hedrick *January 2018-June 2018*

- Completed and presented a research paper on Dissolved Gas Analysis and its history, methods of computation, and a case study using Perception Software

SUPPORTING WORK EXPERIENCE

***Note-Taker,* Accommodative Services Office,** Union College *September 2016-Present*
***Office Assistant*, Advancement Information Services**, Union College *August 2016-June 2019*

CAMPUS INVOLVEMENT

Union College, Schenectady, NY
***Health, Social & Environmental Chair*,** Sigma Delta Tau *September 2017-Present*
Member, Society of Women Engineers *September 2017-Present*
Volunteer, Kenney Community Center *September 2017-Present*
Dancer, Winter Dance Concert and Practica in Dance *September 2016-June 2017*