

EMILY SUN

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EDUCATION

University of Michigan, Ann Arbor • 2018-2022

Industrial and Operations Engineering Major and Mathematics Minor, *GPA: 3.63/4.00*

Relevant Completed Courses: Optimization and Computational Methods, Quality Engineering Principles and Analysis, Data Processing, Programming and Introduction to Data Structures, Applied Regression Analysis

Honors: Magna Cum Laude, Dean's Honor List, University Honors, Regents Merit Scholarship

Activities: Michigan EcoData, Zeta Omega Eta, STEM Society, FEMMES

WORK HISTORY

United Express TechOps Intern, United Airlines

Chicago, IL • 05/2021 - 04/2022

- Worked closely with the United Express Aircraft Projects and Data Analytics teams to spearhead new project efforts and assist with multiple ongoing projects
- Assumed Project Manager responsibilities on a new In-Flight Entertainment initiative and designed a 12-week pilot program that drove a 15 point bump in customer sentiment of CRJ200's by leading working group meetings, performing in-person testings at hangars, ensuring stakeholder responsibility, and maintaining project charters
- Performed ad hoc data analysis in Palantir Foundry on flight paths, statuses, etc. by utilizing Python libraries and presents results and trends in clear, meaningful reports for Flying Partners and external stakeholders
- Automated an existing email process and reduced manual work by learning and executing Palantir's TESS functionality through debugging and problem solving

Research Assistant, AER Lab, University of Michigan

10/2019 - 05/2020

- Used machine learning algorithms in Matlab and Python and trained neural networks to detect activity patterns and automatically score EKG reading from mice up to 95% accuracy

Discrete Mathematics Course Grader, EECS Department, University of Michigan

09/2020 - 04/2022

- Applied knowledge and learning gained as a former student in the Discrete Mathematics course to provide feedback on assignments
- Worked closely with the other Instructional Aides to meet deadlines and construct meaningful feedback to better facilitate individual learning

EXPERIENCES

Michigan EcoData Executive Director and Project Team Leader, University of Michigan

09/2019 - 04/2022

- Managed the organization's university and department sponsorship and delegates tasks to executive board members that contribute to organization's progress to overarching mission statement and goals
- Took all final decisions via collaborative problem solving and objective analysis to ensure the organization's longevity through recruitment of new members and improvement of organization structure

Project Descriptions:

- Identified at-risk areas in Detroit for potential sites for urban farms by developing skills in ArcGIS software and leading a project team to collaborate and analyze open-source Geographical Information Systems data
- Utilized data scraping techniques, Python, and HTML to compile data and create an interactive heatmap of multiple contaminant concentrations in various sites across Michigan

SKILLS

Programming Languages: Proficient with Python, R, SQL, Pyspark, Comfortable with C++ and Matlab

Technical Skills: Six Sigma trained, Project Management, Problem Solving, Leadership

Interests: Sustainability, National Parks, Sourdough Baking, Mental Health Advocacy, Astrology