Emma Rose Gannon egannon@umich.edu

Education

University of Michigan, Ann Arbor, MI *B.S. in Computer Science, B.A. in German*

Expected Graduation in December 2020 GPA: 3.3/4.0

Skills

C++, Python, HTML, CSS, Flask, C, PostgreSQL, Backend API, Data Structures, Algorithms, Discrete Mathematics, Statistics and Probability, User Experience, Human-centered Design, Teamwork

<u>Awards</u>

Target Hackathon 2019 2nd Place, Minneapolis, MN

 Created an algorithm for Target's website to give users a recommended clothing size based on their known sizes from common competitor brands by leveraging existing web API view routes

Piazza Tech Tour 2019 Top 10 Finalist, San Francisco, CA

 Selected out of ten thousand applicants for the Piazza Tech Tour based on professional and academic achievements

Experience

May 2018 - Present

Mcity Software Engineer and Technology Guide, Ann Arbor, MI

- Assisted with the development and documentation of web services that support scheduling, membership information, and test facility automation API for the Autonomous/Connected Vehicle research group at the University of Michigan
- Developed web services utilizing a Python stack (Flask/Redis/PostgreSQL) to automate complex tests and control of the 32-acre test facility
- Enabled complex use cases of various IoT devices such as the Econolite traffic controllers, crosswalks, and controllable lighting
- Designed data structures in PostgreSQL for storing configuration software
- Used Swagger/Open API Specification standards to develop a web portal that allowed for easy discovery of web services, documentation, and testing of services by third parties interested in integrating with Mcity software.
- Built backend software systems to retrieve, store, and archive weather data from local IoT devices and national sources of data
- Participated in code reviews with team to give and receive feedback

Oct. 2017 - Mar. 2018

MSU Federal Credit Union Mobile Interface Design Intern, East Lansing, MI

- Delivered compelling, intuitive visual designs for websites, web-based applications, and mobile applications which were featured on all platforms
- Designed high-level user flows, intuitive navigation systems, and detailed page schematics for mobile
- Followed best coding practices for security, accessibility, and usability throughout all steps of the design process

Leadership

Sept. 2017 - Feb. 2018

Sponsored Fiat Chrysler Automobiles Project Team Lead, East Lansing, MI

- Selected as team lead for a sponsored Fiat-Chrysler Automobiles project to uncover insights related to autonomous vehicle rear-end collision rates
- Used human-centered design techniques to create a prototype to reduce the collision rate
- Demonstrated prototype using a Chrysler Pacifica vehicle to FCA leadership and employees

May 2018 - Dec. 2018

Design for America UMich President, Ann Arbor, MI

- Led and participated in human-centered design and empathy based immersive research to drive social change with meetings ranging from 3-35 people to achieve organizational and individual goals
- Delegated tasks to board members and ensured the organization maintained the project timeline
- Maintained working relationships with one local nonprofit and two large-scale companies

May 2017 - Present

Rewriting the Code *Fellow*, Ann Arbor, MI

- Mentored two underclassmen students to aid them in setting and achieving professional and academic goals
- Connected with a supportive network of over 2000 women across the United States studying computer science to create a safe, online environment to engage in professional development