



## EDUCATION

### University of Michigan

Computer Science Engineering 2019

GPA: 3.75

University Honors (every semester)

Dean's List (every semester)

## EMPLOYMENT

### JPMORGAN CHASE

Incoming Technology Analyst Intern

Chicago, IL  
June 2018 to Aug. 2018

Worked in an Agile environment to develop a Java Spring web application that implements a GraphQL API to consolidate data from existing microservices and systems while using MyBatis to couple objects with stored procedures and SQL statements. Conducted user interviews to develop wireframes using Balsamiq for the frontend design. Also utilized Elasticsearch to create a search framework for the backend of the application.

### DELTA DENTAL OF MICHIGAN

Lead Programming Intern

Okemos, MI  
May 2017 to Aug. 2017

Led a team of seven programming interns as we worked on the company's Business Rules Integrated Development Environment.

Implemented a single sign-on process using LDAP for the claims processing engine.

Added critical features to the rules editor that had been requested by business end-users such as the ability for clients to view and edit rules from multiple rule stores simultaneously.

Converted the client desktop application over from Swing to JavaFX

Added the ability for users to dynamically change their permissions while within the application

### PRETIUM ANALYTICS

Part-Time Programmer

Lansing, MI  
July 2016 to Current

Worked on Business Analytics Framework that incorporates analytic strategy, implementation planning, implementation, and operation. It is a flexible and technology agnostic framework.

Built company website Django.

### DELTA DENTAL OF MICHIGAN

Programming Intern

Okemos, MI  
June 2016 to Aug. 2016

Worked on the Business Rules Integrated Development Environment.

Located missing dependencies and fixed sources of error in the code base caused by upgrading to the current version of XStream.

Moved the installation flow away from DeployDirector, a tool that was no longer supported, to the more flexible Launch4J.

Implemented a process to refresh the JTree whenever a change is made to an open rule store in order to keep the JTree in sync with the server.

## ACTIVITIES

### MPowered Entrepreneurship

Tech Team Director

Moved the organization website to AWS and Wordpress and reestablished the tech team to be an outward facing organization that provides technical services to local startups and organizations in Ann Arbor

### Treble (Integrated Music Player)

Swift Application Development

Developing an iOS application that will allow users to create and listen to music playlists across the music streaming services using Apple's MusicKit, Spotify iOS SDK, and the SoundCloud API.

### Capital One Software Engineering Summit 1st Place

Hackathon

Developed a prototype of a web application, Kickback, that consolidates a user's financials and uses their previous transactions to recommend deals for them using a collaborative filtering system

### EECS 203

Grader

Grader for a discrete mathematics course that is required for all students within the Electrical Engineering and Computer Science Department.

### UM::Autonomy

AI Team

Developed a path planning algorithm for the U:M Autonomy roboboat to use in the "Find the Path" segment of the AUVSI RoboBoat Competition last year. Placed top ten in the nation while competing against teams of graduate students and professionals. This year I am in charge of developing algorithms to detect numbers from images, triangulate the location of pingers, and identify whether an object is a buoy, dock, or some other object. Also worked to develop a full boat simulation in an existing game engine that can simulate our boat movement and sensor data in a virtual world.

### JP Morgan and Chase Code for Good

Hackathon

Developed prototype social media application for use by underprivileged Chicago Public Schools middle schoolers to use to display achievements and keep parents updated on school events.

Developed the application using Bootstrap, JQuery, Python Flask, and MySQL

## SKILLS

**LANGUAGES:** Java, C++, Python, Javascript, Matlab, R, Swift, HTML/CSS

**FRAMEWORKS / TECHNOLOGIES:** React, Angular, Flask, Django, Node.js, D3.js

**TOOLS:** Bash, Git, Balsamiq, Confluence, XCode, IntelliJ, Sublime

**DESIGN:** Illustrator, InDesign, Photoshop, Lightroom