# Conner Bean









#### Education

**B.S. Computer Science,** Michigan State University, East Lansing, MI

- **Expected Graduation: December 2018**
- 3.83/4.00 Computer Science GPA
- 3.34/4.00 Overall GPA
- Minor: Mathematics

#### Coursework:

- Operating Systems (Current)
- Software Design (Current)
- **Data Structures**
- Linear Algebra
- Number Theory I & II

## Experience -

#### Union Pacific - PST | Okemos, MI

Summer 2017

Software Development Intern

- Created a custom new GUI for simulation software through C# that decreased response time through directly linked functions, as well as integrated an independent web browser to render custom made HTML description
- Wrote a locomotive car data logger to output simulation physics data corresponding to a custom created train derail scenario, leading to convenient graphical and reviewable information
- Condensed and improved upon preexisting code through implementing algorithmic strategies and classes, yielding up to 33% reduction in file sizes and 35% reduction in runtime speed
- Developed new simulation physics code to create new scenario possibilities for customers that alter the physics UI and relevant simulation forces

#### Michigan State University | East Lansing, MI

Jan 2015 - May 2017

Computer Science & Mathematics Tutor

- Assisted fellow students through further teaching class material as well as helping to create efficient and working C++/Python programs for CSE 232/231 respectively
- Used effective communication skills while teaching each student in a manner respective to their individualistic needs, while becoming accustomed to working and organizing team environments

## **Projects**

#### MHacks - University of Michigan | 36 hours

Sept 2017

- Created a single-user graphical game written and unit tested in Visual C++ that spawns randomized generations of creatures, each with unique attributes such as linear and circular motion, as well as individual score commands
- Utilized XML data storing to allow users to save and load in-game progress, as well as save and display total overall high scores in real time

#### **Ship-it Day Hackathon – PST** | 8 hours

**Summer 2017** 

Developed a script in C# to parse through customer supplied train lists, look up car data in Raillnc UMLER web database, and use car information to search locally created databases in order to generate consist files

### **SpartaHack – Michigan State University** | 36 hours

Feb 2017

- Worked in a team of 5 to develop a script written in primarily Lua that utilizes neural nets and genetic algorithms to learn through continuous generations how to beat Super Mario
- Enhanced the fitness function in C# through gauging in-game variables and using novelty search to create a correlation relative to victory

Languages

**Technologies** 

C++, C#, Python, C, HTML, CSS, SQL, JavaScript Unix/Linux, Windows, Unity, Bootstrap