Conner S. 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

Software Development Intern

Summer 2017

- 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