

# Sean D. Heffernan

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## EDUCATION & ACTIVITIES

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**Rensselaer Polytechnic Institute, Troy, NY**

**2018 - Present (Expected Graduation Spring 2022)**

- B.S. Dual Computer Science and ITWS

Current GPA: 3.73

### **Relevant Completed Coursework**

- Web Systems Development and Web Science Systems Development
  - Collude.it – Programmed a Web IRC which allows for group communication as well as meeting scheduling through user preferences and voting, utilizing the AMP Stack
  - Degreezy – Created a degree progress tracker as well as semester schedule planner for RPI students, allowing for students to easily view progress towards degree. Written using the MEAN Stack
- Data Structures
  - Developed problem solving skills by constructing complete C++ programs which could tackle exercises shaped around real-world problems
  - Learned how to analyze the performance of algorithms and data structures, as well as design and implement our own efficient custom data structures
- Computer Organization
  - Learned C, Assembly, and concepts of Boolean algebra
  - Applied concepts of multi-cycle and pipelined data path and control to design more efficient programs
- Foundations of Computer Science
  - Applied discrete mathematics and proofs to calculate combinational arguments and develop formal methods of computation.
- Introduction to Algorithms
  - Analyzed the efficiency and runtime of different algorithms
  - Solved problems modeled after real life situations utilizing different design techniques including, but not limited to, greedy, divide-and-conquer, and dynamic programming techniques.

### **Current Coursework**

- Principles of Software
- Operating Systems

### **Accomplishments:**

- Awarded the Rensselaer Leadership Award in 2018, 2019
- Dean's Honor List in 2019
- Member of Gamma Nu Eta and Upsilon Pi Epsilon (ITWS and Computer Science Honor Societies)

### **Extracurriculars:**

- RPI Club Water Polo Team
- Japanese Culture Association
- Web Technologies Group (Chair)

## SKILLS

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|-------------------|--------------|--------------|
| ○ C               | ○ JavaScript | ○ Express.js |
| ○ C++             | ○ TypeScript | ○ AngularJS  |
| ○ Leadership      | ○ jQuery     | ○ Node.JS    |
| ○ Public Speaking | ○ PHP        | ○ Apache     |
| ○ HTML5           | ○ Vue.js     | ○ MySQL      |
| ○ CSS3            | ○ MongoDB    | ○ PhpMyAdmin |

## EXPERIENCE

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**Project Manager, Shuttle Tracker (Rensselaer Center for Open Source)**

**2019 – Present**

- A program used by students at RPI to keep track of the shuttles that run throughout campus as well as their routes and stops
- Made ETA viewing accessible through the creation of two endpoints which display ETAs
- New features implemented under leadership include a dark mode, smoother tracking of shuttles, and enhanced admin features
- Uses Go, Vue, TypeScript, and Postgres