Sean **Prendi**

Software Engineer

(914) 309 5599 | sprendi@andrew.cmu.edu | SeanPrendi | seanprendi.me

Education

Carnegie Mellon University
Pittsburgh, PA

B.S. in Mathematics **(GPA: 3.88)** *Aug. 2018 - May 2022*

- Relevant Coursework: Intro to Computer Systems, Software Engineering for Startups, Principles of Imperative Computation, Great Ideas in Theoretical Computer Science, Functional Programming, Set Theory, Algebraic Structures, Concepts of Mathematics

Technical Skills

Programming and Scripting: C · Python · Standard ML · R · HTML
Frameworks and Libraries: Pytorch · NumPy · OpenCV · Flask · React Native · ReactJS · x86

Work Experience

Carnegie Mellon CREATE Lab
Pittsburgh, PA

Software Engineer & Research Intern *Sep. 2018 - Jan. 2020*

- Trained deep convolutional neural networks in Python for detecting environmental pollution in videos
- Implemented architectures from previous research to establish model performance baseline
- Designed video preprocessing algorithm with OpenCV to eliminate low-motion data to reduce human efforts in data labeling
- Communicated technical details to non-technical audiences through research presentations

Carnegie Mellon School of Computer Science
Pittsburgh, PA

Teaching Assistant - 15122 (Principles of Imperative Computation) *Aug. 2019 - Dec. 2019*

- Teach labs for introductory programming and data structures course at CMU (500+ students)
- Host office hours and graded assignments for students

HAT Photography
Pittsburgh, PA

Databasing & Web Development Intern *Apr. 2018 - Aug. 2018*

- Created MySQL database for maintaining prop inventory
- Designed main company website with HTML and JavaScript

Projects

NextUp (Hackathon Project)
Pittsburgh, PA

- Developed website that allowed users to vote on songs and change in real time the queue of a Spotify playlist
- Used the Spotify API in tandem with a Flask backend and ReactJS to create the functional website
- Placed 3rd overall in hackathon out of 50+ teams

Calorimager
Pittsburgh, PA

- Used OpenCV for estimating volume of food based on shape and computed size
- Utilized transfer learning to improve Tensorflow model for food recognition
- Queried wolfram alpha API for calorie estimation based on computed food volume

Honors & Awards

2019 **Recipient**, Carnegie Mellon Summer Undergraduate Research Funding *Pittsburgh, PA*
2018 **Third Place**, Hack-112 Hackathon *Pittsburgh, PA*
2018 **First Place**, Hack-112 Hackathon People's Choice *Pittsburgh, PA*

Activities and Leadership

Mr Yuk Ultimate Frisbee: Team Member
Boy Scout Troop 24: Eagle Scout and Senior Patrol Leader