PAUL C. DAVIS

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EMPLOYMENT

Software Intern Copious Imaging Summer 2021

WISP Analysis Tool Optimization

- Updated 2-year-old Python codebase to be compatible with new file formats being used to train machine-learning algorithms and wrote detailed documentation for my updates and the tool's functions.
- Improved compatibility of Analysis Tool with different types of data (primarily ocean and ground data).
- Worked with Matplotlib and NumPy for data visualization of comparison metrics between truth data and captured data.

Data Management Automation

- Developed tool to automate the creation of custom data pointer files using Python.
- Cut down on manual data entry time from ~30 seconds per file to less than a minute for hundreds of files.

Westford Academy House Staff

Town of Westford

September 2019 - June 2021

- Managed the technical side of school events and communicated with event coordinators.
- Managed the safe removal and storage of lighting equipment and theatrical sets for the drama department.

EDUCATION

University of Massachusetts - Amherst

Current GPA: 3.929

Expected May 2025

- B.S. in Computer Science with a planned graduation date of May 2025.
- Relevant Undergraduate Coursework:
- Fall 2021: Calc I, Programming with Data Structures course and a seminar on the History of Computing.
- Spring 2022: Calc II, Programming Methodology course, C course, Comp Sci Tutoring course, Robotics course.

Westford Academy

Final Weighted GPA: 4.09

Fall 2017 - June 2021

- Graduated June 2021
- Relevant coursework: AP Computer Science A, Honors Data Structures, Honors Calculus.

PROJECTS (ALL IN GITHUB)

- Face and Hand Recognition GUI App (Winter 2022); Python
 - Tkinter GUI app using pre-made face- and hand-detection models in OpenCV.
- Hack UMass 2021 Project: Compliment Bot (Fall 2021); Python

Raspberry-Pi-based remote-controllable car equipped with proximity sensors and text-to-speech capabilities. Eye tracking using OpenCV coded but not fully implemented by end of hackathon.

Various Other School Projects ("all-java" on GitHub) (Fall 2019 – Spring 2021); Java
 Projects and UML diagrams for a variety of high school projects from AP Comp Sci and Data Structures classes.

LANGUAGES AND TECHNOLOGIES

- Java; SQL; Python; Linux terminal interfacing; Git; some C/C++.
- PyCharm; IntelliJ/Eclipse; DB Browser; PuTTY/WinSCP; GitLab/GitHub; Visual Studio Code; Debugging tools.

ADDITIONAL EXPERIENCES AND AWARDS

- E-Board-in-training position for UMass Cybersecurity club, also a member of the machine learning club
- High Honors achieved for all semesters of high school and scores of at least 4 on all AP exams taken.