

Alexander Kassouni

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Education

University of Pennsylvania, B.S.E. in Computer and Information Science

May 2022

GPA: 3.75, Dean's List

Selected Coursework

CS: Algorithms, Operating Systems, Compilers, Computer Architecture

Math: Advanced Linear Algebra, Abstract Algebra, Stochastic Processes, Game Theory, Probability Theory

Skills

Advanced: Java, C/C++, JavaScript, Python

Proficient: Common Lisp, Android, React, JQuery, Django, PostgreSQL, HTML/CSS

Work Experience

Hawaii Space Flight Lab, Summer Intern

June – July 2017

- Developed a Qt user interface for the mission design tool component of the NASA EPSCoR COSMOS project, an open source project for the planning and executing of launches.

Fang-Yen Lab, Software Development

February – August 2019

- Worked on WormPicker, a patented robotic arm capable of arranging microscopic nematodes (*C. elegans*) on petri dishes
- Developed computer vision algorithms for segmentation and tracking of *C. elegans* using C++ and the OpenCV library
- Automates a previous bottleneck on throughput of *c. Elegans* genome research

Smirta Innovations, Software Development

May – Present 2020

CareBot:

- Developer of CareBot Web, a React app for directing patients to appropriate local care facilities based on their symptoms
- Integrated an interactive chat bot for diagnosis of user's symptoms
- Project live demoed to potential customers

deepPath:

- Worked on deepPath, a web app for pathologists to manage and annotate digital biopsy images
- Primary responder to customer bug reports and implemented 4 major feature requests

CIS 262 (Automata, Computability, and Complexity), Teaching Assistant

Fall 2020

- Create rubrics for standardized grading of homework and exams
- Hold weekly 1:1 office hours, helping students with the material

Leadership and Volunteer Experience

Middle School Debate Coaching

May 2018 – May 2020

- Coached and mentored parliamentary middle school debate team
- Managed and organized 40+ parent volunteers to satisfy each tournament's judging requirement