

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

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

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 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

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

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

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