https://jhw263.github.io

EDUCATION

Cornell University Ithaca, NY

Bachelor of Engineering in Computer Science; GPA: 3.2

Aug. 2016 - May. 2020

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Mobile:

o Relevant Coursework: Analysis of Algorithms, Database Systems, Artificial Intelligence, Data Structures & Functional Programming, Systems Programming, Discrete Structures, Networks, Engineering Probability & Statistics, OOP & Data Structures, Intro to iOS App Development, Principles of Backend Engineering

Awards: Dean's List (GPA: 3.62)

Spring 2018

EXPERIENCE

Lockheed Martin Manassas, VA

 $Incoming\ Software\ Engineering\ Intern$

Jun. 2018 - Aug. 2018

Netsurit Brooklyn, NY

DevOps Engineering Intern

 $Jun. \ 2017 - Aug. \ 2017$

- Utilized remote accessing software (LabTech/ConnectWise Automate) to monitor 80+ servers and 2000+ client workstations for patching and troubleshooting.
- Wrote scripts using proprietary LabTech syntax to automate the assessment of newly-issued tickets, deploy specific protocols and executables, and debug or update machines.
- Resolved proactive and NOC alerts, resulting in over 100 hours of accumulated ticket maintenance.
- o Participated in pair programming with other engineers, and assisted daily customer phone support.

Montclare Lab for Protein Engineering

Brooklyn, NY

Junior Researcher @ NYU Tandon School of Engineering

Jun. 2014 - Sep. 2014

- o Modified the wild type *Phosphotriesterase* enzyme via bacterial transformation of AF-IQ cells into M3 and S5 mutants in order to combat organophosphates such as nerve agents and pesticides.
- Assessed enzyme kinetics of Phosphotriesterase by using SDS-PAGE and enzyme assay methods.
- Measured catalytic efficiency through graph analysis of Lineweaver-Burk plots and Michaelis-Menten curves.
- o Applied experimental findings practically towards sarin gas, pesticides, and insecticides.

SKILLS

Languages: OCaml, Java, JavaScript, Python, C, Swift, HTML, CSS, R

Operating Systems: Windows, Linux (Ubuntu), Mac OS X via VMs

Applications: Git, Logisim, Blackbox/Glassbox/JUnit Testing, Vim, LaTeX, Microsoft Office

Lab Skills: Bacterial Transformation & Induction, Gel Electrophoresis, Cell Isolation, Sonication, Centrifugation, Fast

Protein Liquid Chromatography, Dialysis, Enzyme Assays

Extracurriculars: Poseidon Dragon Boat Team, Cornell Varsity Badminton Team (D-I)

PROJECTS

Tetris AI: Simulated Tetris gameplaying bot that uses genetic & greedy algorithms to clear 100+ lines in JavaScript.

Dijkstra Visualization: Visual render of Dijkstra's shortest path algorithm written in Java using heaps.

MIPS Architecture Processor: Fully-pipelined MIPS processor (circuit) with a working ALU, created in Logisim.

OCaml Interpreter: Interpreter with roots in OCaml, JavaScript, and Racket, which can handle semantic commands

UNO!: Fully functioning card game, UNO!, designed with difficult CPUs (AIs) and a visual GUI, written in OCaml.

Study Pairing App: iOS application that pairs students with tutors to encourage studying (BigRed//Hacks, 2017).