

SEAN FUHRMAN

(908)285-3692

San Diego, CA

SEANTFUHRMAN@GMAIL.COM

Github: <https://github.com/seantfuhrman>

LinkedIn: <https://www.linkedin.com/in/sean-fuhrman>

Summary of Qualifications

Current 3rd year Computer Engineering Student at UCSD. Highly proficient in programming with over 7 years of experience developing applications; with a broad knowledge base of hardware and software to design innovative systems. Experienced in incorporating Python libraries such as Numpy, PyTorch, Pandas, Matplotlib and C++ Standard Template Library. Extensive leadership and teamwork experience, with an ability to communicate my ideas clearly.

Skills

- **Programming Languages:** Python; C++/C; Java; Linux/Shell; JavaScript;
- **Software:** VS-Code; MS Office; Word; Excel; Google Suite; Google Docs; Google Slides; Google Sheets; Zoom;
- **Libraries:** Matplotlib; Numpy; PyTorch; C++ STL;
- **Hardware:** Raspberry Pi; Arduino; designing and soldering circuits;

Education

San Diego, CA	University of California San Diego	2020 – 2024
<ul style="list-style-type: none">• Bachelor of Science in Computer Engineering GPA: 3.75• Coursework: Object Oriented Programming, Advanced Data Structures & Algorithms, Computer Architecture, Probabilistic Machine Learning, Circuit analysis, Analog Design, Non-Linear Circuits.• Awards: Provost Honors• Extracurriculars: Ski & Snowboard Team, Alpha Epsilon Pi Philanthropy Chair, Sailing Club		

Experience

<u>Research Internship, System Energy Efficiency Lab</u>	<u>Language: Python</u>	July 2022- Present
<ul style="list-style-type: none">• Utilizes: Python, Numpy, PyTorch, Matplotlib• Assisted with research on Hyper-Dimensional Computing and its use for energy-efficient processing-in-memory machine learning.• Developed Python model to simulate machine-learning algorithm running on error-prone hardware, and then analyze results.		
<u>Teacher's Assistant Internship, Game-U</u>	<u>Languages: JavaScript, C#</u>	2016
<ul style="list-style-type: none">• Utilizes: JavaScript, C#, Unity• Teacher's assistant for after school programs and summer camp to teach children video game programming		

Projects

<u>LED Infinity Mirror</u>	<u>Language: C</u>	2021
<ul style="list-style-type: none">• Utilizes: Arduino• Designed a Hand-Built LED infinity mirror with color-changing LED strip.		
<u>Room Automation System</u>	<u>Languages: Python, C</u>	2016-2020
<ul style="list-style-type: none">• Utilizes: Raspberry pi, Arduino, Speech Recognition Library, RESTful APIs• Designed, prototyped, and debugged microcontroller system designed to act as "assistant" via voice commands• Capable of controlling lights, telling the weather, and playing music		
<u>Falling Aliens</u>	<u>Language: Javascript</u>	2015
<ul style="list-style-type: none">• Utilizes: JavaScript, Unity• Designed and programmed a video game posted to Apple app store, users fight off aliens in 2D arcade style game.		