

Seong Hyun (Matthew) Park

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EDUCATION

University of California, Berkeley

Bachelor of Arts

Major in Computer Science

Cumulative GPA: 3.87/4.0

Relevant Coursework: Operating Systems and Systems Programming, Data Structure, Database Systems, Discrete Mathematics and Probability, Introduction to R, Machine Structure, Computational Models of Cognition

Berkeley, CA

2020 Aug - Current

Expected graduation: May 2024

EXPERIENCE

UC Berkeley Electrical Engineering & Computer Sciences (EECS)

Aug 2023 - Present

Data Structure (CS61B) and Machine Structure (CS61C) Academic intern

Berkeley, California

- Held weekly mini-lecture lab sessions, assisting and guiding approximately 50+ students in hands-on exercises
- Facilitated weekly office hours to address individual student queries and provide personalized help

OrangeShine

May 2023 - Aug 2023

Software Engineer intern

Cerritos, California

- Upgraded Python, Django, and related packages to ensure the application was built using the most recent and secure software versions
- Improved certain web pages performance by analyzing and minimizing ORM/SQL data queries, reducing server load and enhancing response times by 40%
- Contributed to debugging and issue resolution, and developed 5+ web APIs

Game Theory Research & Development Group at Berkeley

Jan 2023 - May 2023

Database Compression Researcher

Berkeley, California

- Collaborated with a multidisciplinary team to develop a supervised machine learning model for compressing game results databases
- Conducted research and data analysis to curate a suitable dataset for training the model, optimizing for accuracy and efficiency
- Applied neural networks to solve one of the database compression tasks, maintaining around 99.0 ~ 99.8% accuracy for certain games and preserving data integrity

Boram Fisheries Corporation

Aug 2022- Nov 2022

Software Engineer Intern

Seoul, South Korea

- Spearheaded the development of a user-friendly website using HTML, CSS, and JavaScript
- Implemented responsive design to ensure seamless user experience across various devices
- The resulting website was well-received by Boram Corporation's staff, significantly enhancing the company's online presence and accessibility

PROJECTS

Custom CPU

July 2023 - Aug 2023

- Designed and built a custom CPU architecture using Logisim which required proficiency in logic design
- Implemented a pipelined architecture, incorporating the 5 stages to optimize instruction throughput

Automated Bitcoin Trading Bot

Aug 2021 - Jan 2022

- Developed an automated cryptocurrency back trading bot using Python, integrating technical indicators such as RSI and Moving Averages for data-driven decision making
- Conducted optimization to ensure the bot's profitability in various market conditions; the bot was capable of making approximately 10 trading decisions per day

ADDITIONAL

Technical Skills: Python, Java, C++, C, Assembly, HTML/CSS, JavaScript, SQL, Scheme, R

Technology/Frameworks: NumPy, PyTorch, Django, REST, Unix, Linux, RISC-V, Git, Docker, Logisim, Pintos, Kernel, x86