

Jay Chong

Resume has been modified for privacy. Please contact me at jaychong@berkeley.edu

EDUCATION

University of California, Berkeley
BS, Electrical Engineering and Computer Science

Berkeley, California
August 2024 – May 2026

EXPERIENCE

National Center for Supercomputing Applications
Cybersecurity Engineering Intern

Champaign, Illinois
June 2024 - August 2024

- Checked the existence of 100+ Service Principals in DNS, service indexes, and Qualys report. Compiled a spreadsheet containing 300+ data points.
- Developed a web application using React for the frontend and Node.js with Vercel serverless functions for the backend, enabling secure submission and aggregation of 500+ SSH keys.
- Implemented robust client-side validation for SSH key formats and fingerprint extraction using regular expressions and the node-forge library, allowing for 30% faster processing.

SETI Institute
Computation Intern

Mountain View, California
January 2024 – June 2024

- Utilized Numpy, Matplotlib, and Python3, to process and aggregate up to 1,000,000 data points to feed into RADMC3D computation model to produce 50+ images.
- Developed a robust and efficient modeling framework that can be used by the scientific community to analyze JWST data and study protoplanetary disk winds.
- Contributed to the modification of RADMC-3D, creating high-fidelity models to simulate wind structures in protoplanetary disks.

Palo Alto Networks & CodePath
Cybersecurity Certificate Student

Remote
February 2022 - December 2023

- Simulated complex cloud and network breaches in virtual environments, mastering the identification and analysis of attack vectors and threat actors.
- Developed automation scripts using Palo Alto Networks' Strata, Prisma, and Cortex platforms to enhance threat detection and incident response workflows, significantly reducing manual intervention.
- Applied knowledge of network security protocols, including IPsec and SSL/TLS, to secure data transmission and network communications.

PROJECTS

Compromise Vault | React, Node.js, PostgreSQL, Vercel

June 2024 - August 2024

- Created validations for key formats and fingerprint extraction using regular expressions and the node-forge ensuring the integrity and authenticity of submitted keys.
- Enhanced user experience with dynamic loading states, error handling, and status messages, providing clear and immediate feedback during the key submission process.

AstroWind | Python, NumPy, Matplotlib, SciPy

February 2024 - June 2024

- Created reusable, efficient modules for various astrophysical calculations, enhancing the accuracy and performance of protoplanetary disk models.
- Developed high-fidelity models using RADMC-3D to simulate wind structures in protoplanetary disk.

Notion Reminder Bot | Discord.JS, Python, Javascript

December 2022 - February 2023

- Co-developed the Notion Bot, a discord bot that delivers task notifications for over 200+ members in a CS club.
- Built 9 custom slash commands to execute bot commands & integrated error handling and bot optimization.

SKILLS

Languages: Python, C++, Bash, JavaScript, Typescript, SQL, HTML

Developer Tools: VS Code, Git, PowerShell, Slack, Jira, GitHub, PostgreSQL

Cybersecurity Tools: Nmap, Splunk, Qualys, Wireshark, Metasploit, Kerberos