PROFESSIONAL EXPERIENCE

Roblox, San Mateo, CA

July 2025 – Present

Software Engineer, Networking Team

Brown University, Providence, RI

Undergraduate Teaching Assistant, Operating Systems

January 2025 - May 2025

- One of 12 TAs for Operating Systems (CSCI 1670/90).
- Built and maintained course website throughout the semester.
- Performed homework and project grading.
- Assisted students in debugging during office hours as well as through online support forums.

Undergraduate Teaching Assistant, Computer Networks

August 2024 – December 2024

- One of 11 TAs for Computer Networks (CSCI 1680).
- Provided guidance and mentorship to teams implementing the network stack in C, C++, Go, or Rust.
- Conducted office hours and debugging sessions throughout the semester.
- Worked on the development of course materials and auto-grading frameworks.

The Washington Post, Washington, D.C.

Engineering Intern

June 2024 – August 2024

- Designed and built new flexible backend payment infrastructure for all customer-facing services using AWS technologies.
- Acted as on-call engineer, responding to live issues and ensuring robust operation during breaking news traffic spikes.
- Developed next-generation site search experience featuring improved autocomplete relevance and instant result suggestions.

Engineering Intern

June 2023 - August 2023

- Overhauled paywall targeting functionality, achieving ~250x speedup using advanced data structures.
- Proved and implemented novel algorithm that statistically reduced average evaluation time of business rules by up to 50%.
- Integrated into Agile software development lifecycle, attending daily standups, sprint reviews, and refinements.

EDUCATION

Brown University, Providence, RI

Degree Awarded May 2025

Applied Mathematics and Computer Science Sc. B.

Cumulative GPA: 4/4.00

Relevant Coursework: Database Management Systems, Operating Systems, Computer Networks, Compilers and Program Analysis, Multiprocessor Synchronization, Data Structures and Algorithms, Deep Learning, Optimization and Stochastic Calculus.

Extracurriculars: Brown ICPC team (2021 - top 20 in Northeast NA, 2022), Brown Chess Club

SELECTED PROJECTS

siliconnn March 2023 – May 2023

https://github.com/brandon-gong/siliconnn

- Neural network implementation in pure ARM64 Assembly for Apple Silicon.
- Parsing datasets from CSV, configurable layer sizes, training with backpropagation.

ptree.ml July 2022 – August 2022

https://github.com/brandon-gong/ptree.ml

- Multipurpose data serialization / deserialization library for OCaml.
- Parse INI, JSON, or XML to unified data structure that allows efficient, persistent edits.

neche December 2021 – January 2022

https://github.com/brandon-gong/neche

- Neuroevolution-based checkers engine written in Rust.
- Implements evolution, move generation, and minimax evaluation with pruning and quiescence search.