Christopher Chen

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EDUCATION

Brown University *Sep 2022 - May 2026*
Sc.B in Computer Science and Applied Mathematics *GPA: 3.94/4*

Relevant Coursework: Design and Analysis of Algorithms, Operating Systems, Database Management Systems, Computer Networks, Deep Learning, Computer Vision, Data Science, Compilers and Program Analysis, Operations Research

TECHNICAL SKILLS

Languages: Python, Java, Javascript, C, C++, Go, Ruby, Rust, SQL, Dart, HTML/CSS
Frameworks & Technologies: Flask, AWS, PostgreSQL, React.js, Node.js, Ruby on Rails, Docker, TensorFlow, PyTorch
Tools: Git, APIs, CI/CD, Linux/Unix, Figma, TailwindCSS

PROFESSIONAL EXPERIENCE

GitHub Remote
Software Engineering Intern *Jun 2025 - Aug 2025*
- Architected and implemented RESTful API endpoints in Ruby on Rails enabling full CRUD operations for GitHub Projects, supporting 1M+ active project repositories
- Accelerated deployment velocity through comprehensive integration test suite implementation conforming to GitHub's CI/CD pipeline standards
- Pioneered agentic AI integration by connecting API endpoints to GitHub's MCP server, enabling autonomous project management through GitHub Copilot Chat

Hightainment Remote
Software Engineering Intern *Jan 2025 - Apr 2025*
- Engineered scalable Python APIs for core app features including user favorites and watch provider management
- Reduced manual data processing by 80% through automated AWS Lambda pipelines integrating TMDB APIs and FlixPatrol web scraping
- Optimized database performance by 35% by designing efficient MySQL schemas with proper indexing strategies for complex relational queries

Vane Remote
Software Engineering Intern *Jun 2024 - Oct 2024*
- Led migration from MongoDB to Supabase, rapidly mastering new database architecture to design optimized schemas and APIs, improving query performance by 40% and enabling robust user management
- Built iOS app landing pages in Flutter/Dart, including friend addition, event search, chat, and user profile pages
- Automated data collection with a Python-based web scraper, populating the Supabase database with event information and reducing manual data entry by 80%

PROJECTS

IP/TCP | GitHub Link *Oct 2024 - Dec 2024*
- Built a production-grade concurrent TCP/IP stack in Rust handling 2% packet loss tolerance with adaptive retransmission algorithms, dynamic window sizing, and thread-safe network resource management

Weenix OS | GitHub Link *Jan 2024 - May 2024*
- Developed Unix-based kernel with 5,000+ lines of C code, implementing preemptive scheduling supporting 1,000+ concurrent processes
- Built multi-threaded file systems with buffer caching, enabling high-throughput file operations via POSIX calls

LEADERSHIP AND ACTIVITIES

Hack@Brown Providence, RI
Dev Team Lead *Sep 2024 - Ongoing*
- Lead 8-person development team building event website for 500+ attendees using React/TypeScript
- Coordinate with cross-functional leads to deliver technical solutions on schedule