

Charles Tang

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EDUCATION

Brown University

Aug. 2023 – May 2027

Bachelor of Science in Computer Science & Applied Mathematics

Providence, RI

- GPA: 4.0/4.0; Full Stack @ Brown, Society of Asian Scientists and Engineers, Badminton Team, Delta Tau
- Relevant Coursework: Algorithms, Computer Systems, Machine Learning, Deep Learning, Optimization

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, Java, SQL, OCaml, HTML/CSS, MATLAB

Frameworks: React.js, Django, Rails, MySQL/Postgres, FastAPI, Express.js, TensorFlow, Tailwind, REST API

Developer Tools: Amazon Web Services, Git, GitHub, Postman, Node.js, Bash, Linux, Docker, Jenkins, Jira

Certifications: AWS Certified Cloud Practitioner, Deep Learning Specialization, Advanced TensorFlow Specialization

EXPERIENCE

Cisco Meraki

May. 2025 – Aug. 2025

Software Engineering Intern

San Francisco, CA

- Created 1st-ever E2E testing library for Meraki & Cisco Switches (**Python**, Meraki API) for a mock customer network with 50+ devices, verifying consistency between Meraki Dashboard UI actions and API responses
- Automated commit validation by integrating E2E testing library into Meraki switches firmware CI pipeline (**Docker**, **Jenkins**), enabling real-time commit validation; cut manual QA effort by 90%, and improved release confidence
- Built Python automation for core dump decoding with **Git/Jira** integration, enabling proactive issue detection, streamlined debugging workflows, and accelerated root cause analysis for a 50+ person Network Engineering team

Full Stack @ Brown

Aug. 2024 – Dec. 2024

Project Manager

Providence, RI

- Led a team of 15 student developers to build a fully featured **Django (Python)** registration portal and camp website for the New England Chinese Youth Summer Camp, serving over 500 campers and 100 staff members
- Set up CI/CD pipeline with GitHub Actions to automate testing, build, and deployment onto DreamHost

IOMICS Corporation

Dec. 2023 – Nov. 2024

Software Engineering Intern

Cambridge, MA

- Developed a chatbot app with **LangChain**, **FastAPI**, **Postgres**, and **Docker** deployed to drug discovery platform, enabling users to query both PubMed literature and internal platform knowledge through natural language
- Tested app across medical Q&A (95% accurate) and iterated through local LLMs, RAG, and **OpenAI API**
- Optimized a Python-based feature selection framework for structured omic data by profiling CPU/memory usage with Scalene and implementing **parallel processing** via sklearn, reducing average runtime by 80%

BJ's Wholesale Club

Jun. 2024 – Aug. 2024

Software Engineering Intern

Marlborough, MA

- Formulated integer programming models (Python, Pandas, Google OR Tools) to simulate forklift routes in warehouses, optimizing pick paths and inventory allocation to reduce travel time by 20% and produce **\$851K in annual ROI**
- Pioneered robotic forklift deployment initiatives in East Coast distribution centers, aligning contractors, internal robotics engineers, and senior DC leadership; delivered **\$331K annual ROI** through improved efficiency

PROJECTS

FinnAI 🦾 | *React, Python, FastAPI, JavaScript, OpenAI API*

2024

- Created a chat-bot app (React + Ant-D) for generating financial reports and processing real-time market data
- Led API (Python) development (team of 4) connecting data from Yahoo Finance and OpenAI API

WPI-Roadmap 🦾 | *React + Redux, Express, Firebase, JavaScript, Ant-D*

2024

- Led front-end development (React + Ant-D) of academic advising app and integrated with FirebaseAuth
- 2024 GoatHacks (HackWPI) Winning Team (1st/50+ teams), now used by 50+ users

Digital Sign-in/out System 🦾 | *React + Redux, Express, Firebase, Azure, MySQL, Tailwind*

2023

- Led hardware and database integration (team of 4) for school sign-in system with MySQL, Python, and React
- First-ever student-created app used by 100+ students at WPI in collaboration with WPI InfoSec/NetOps team