Charles Tang

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EDUCATION

Brown University — 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, MySQL/Postgres, FastAPI, Express.js, LangChain, 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 Engineer 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 a multi-agent Q&A chat interface leveraging **LangGraph** and FastMCP (**Model Context Protocol**), integrating Atlassian, Jenkins, and Meraki APIs—actively used by 50+ engineers to streamline workflows

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 Engineer 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
- 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 Engineer 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