Gideon Tong

Phone: (805) 633-0745 Email: gideon@gideontong.com Website: gideontong.com LinkedIn: /in/gideontong GitHub: /gideontong

Education

University of California San Diego

September 2019 — December 2022

- Bachelor of Science in Electrical Engineering (emphasis machine learning and controls), GPA: 3.74
- Coursework: data structures and algorithms, system design, linear control, optimization, machine learning

Experience

NVIDIA

Software Engineer Intern

Sept. 2021 — Dec. 2022; June 2022 — Sept. 2022

- Developed tools for comparing RADAR and LiDAR point clouds from autonomous vehicles for mapping
- Analyzed and evaluated performance of different raytracing algorithms for 3D map creation
- Created and deployed React frontend for statistics and management of distributed map processor
- Improved performance of map processor Go REST API, which brought server timeout rate to 0% and decreased average response time from 220 seconds to 30 milliseconds

Facebook (Meta Platforms)

Technical Program Manager (Contract)

Jan. 2022 — May 2022; Oct. 2022 — Dec. 2022

- Provided primary technical escalation point for development of Cinder (Python interpreter)
- Developed and implemented a framework for analyzing performance, increasing team productivity by 50%
- Implemented best practices and processes for code review in C, C++, and OCaml, resulting in 30% increase in code quality
- Provided mentorship and facilitated daily standup, data tracking, and aggregate team reporting

JP Morgan Chase

Software Engineer Intern

June 2021 — August 2021

- Developed production-quality REST API capable of serving remittance checks to clients
- Created Kafka consumers for envelopes, deploying to Kubernetes cluster
- Updated Spring Boot logging microservices responsible for processing \$1 trillion per day

US Air Force

Software Engineer Intern

January 2021 — May 2021

- Created software library for electromagnetic warfare simulator allowing results analysis
- Saved 13.806 man-hours of work in conversion from legacy simulators using this library
- Saved \$225 million by rewriting old model library used in testing mission data for 30 countries

Eccalon LLC

Software Engineer Intern

September 2020 — December 2020

- Led a US Department of Defense-related project for the US Army Rangers (75th Regiment)
- Developed Python (Django) backend that reduced processing times from 8 hours to 350 milliseconds (>99.99%)
- Collaborated with frontend team to create new REST microservices that provided real-time analytics

Projects

Amy: Chatbot (Link: amyhelps.ml)

- Built Discord chatbot in JavaScript and Python with over 300 video game AI agents and moderation tools
- Over 100,000 site visitors and 75,000 daily active users in 6 countries managed with MongoDB instance

Platypus: Cybersecurity Scanning Utility (Link: getplatypus.ml)

- Created JavaScript tool to automatically scan visited websites, checking for all released CVE vulnerabilities
- Achieved 1st place at Cal Poly San Luis Obispo hackathon with Docker and PostgreSQL deployment

Skills

- Languages: Python, C/C++, Java, Go, JavaScript (ES6), SQL, Objective-C, Swift, HTML/CSS
- Frameworks: React, Node.js, Express.js, Angular, Django, Flask, MongoDB, Google Cloud, AWS, Spring, Kafka
- Workflow: Git, GitHub, Continuous Integration/Deployment, Jenkins, Unit Testing (Junit), Docker, Kubernetes
- Platforms: Unix/Linux, Windows, macOS, iOS, Android, Arduino, Raspberry Pi
- Schematic Capture/Board Layout: Altium, Verilog, System Verilog, OrCAD, PSpice (Circuit Simulation)