Tyler H. Lin

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Education

Georgia Institute of Technology | Atlanta, GA   Aug. 2021 – May 2024
Bachelor of Science in Computer Science   *GPA 4.00*

Experience

MathWorks | Natick, MA   May 2022 – Aug. 2022
Software Engineering Intern
- Instrumented the ThingSpeak IoT analytics platform with Prometheus metrics to observe 30+ million API requests per day and generated 16 dynamic Grafana visualizations to reveal excess request trends
- Conceived, implemented, and tested design changes for an API endpoint controller that processes 300+ requests/sec., resulting in a 40% increase in max throughput and 70% decreases in p99 and max latencies

Georgia Tech Professional Education | Atlanta, GA   Jan. 2022 – May 2022
Student Assistant, Application Support & Development
- Developed an app to expedite employee ramp-up by presenting onboarding checklists to employees, displaying team progress to managers, and integrating tasks and permissions with Microsoft 365 and Outlook
- Automated the migration of 1.5 TB of data from file shares to Microsoft SharePoint by intelligently renaming and restructuring files and folders to abide by OneDrive path restrictions while maintaining file metadata

The Johns Hopkins University Applied Physics Laboratory | Laurel, MD   Sep. 2019 – Aug. 2021
Software Engineering Intern
- Simulated 10+ min. combat maneuvers of army battalions consisting of 400+ soldiers each in order to evaluate wireless network connectivity between different units and optimize communication strategies during battle
- Engineered and presented a proof-of-concept patient medical record database backed by a distributed ledger in order to assess the feasibility of blockchain as a basis for secure and interoperable health records

Projects

Attendance for Google Meet™ | *JavaScript, HTML, CSS*   2020 – Present
- Open–source Google Chrome extension with over 40,000 users from more than 100 countries
- Automates attendance tracking in Google Meets by identifying and proxying obfuscated internal Meet functions to unobtrusively aggregate participant data
- Integrates an accessible user interface into the Meet layout that enables users to view and sort attendance, create and edit class rosters, and export logs to Google Sheets organized by class and Meet code
- Awarded a Featured badge by the Chrome Web Store team for "follow[ing] [their] technical best practices and meet[ing] a high standard of user experience and design"

The Puzzled Cube | *Java, JavaScript (Node.js), Express, SQLite*   2021
- Puzzle platformer video game made in Java Swing that features 24 levels of increasing complexity, 3 unique power-ups, and self-made graphics and animations
- Features a global leaderboard connected to a secure SQLite database through an Express.js RESTful API
- Won the 2021 Maryland FBLA Computer Game and Simulation Programming Competition

Skills

Languages: JavaScript, HTML, CSS, Java, Ruby, C#, Python, Bash, LaTeX

Technologies: Node.js, Bootstrap, Ruby on Rails, Docker, Prometheus, Grafana, Unity, Hyperledger Fabric

Concepts: Data Structures, Object–Oriented Programming, Model–View–Controller, REST, TDD, Scrum

Other: Certified Chesapeake Bay Landscape Professional Apprentice (CBLP-A); possess professional skills and knowledge in sustainable landscape design, installation, and maintenance.