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Kyle Liu

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EDUCATION

University of Maryland College Park	B.S. Computer Science	Expected: December 2019
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Programs: University Honors; Hinman CEOs

TECHNICAL SKILLS

Languages/Technologies: Java; C; Python; Ruby; Angular; Polymer; Node.js; Sql; Docker; AWS; ELK; Git

EMPLOYMENT

Capital One	Software Engineering Intern	Summer 2018 & 2019
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- Built a Redis cache for the Refer-A-Friend Retail API in Node.js to reduce customer wait time by up to 1000%
- Added 90% unit test coverage for caching service with Sinon to ensure code quality and reduce development time
- Designed Cloudformation templates for Lambda and Elasticache on AWS to improve scalability and cut costs
- Built a new case management analytics dashboard in Angular to reduce wait time and save \$1000+ per user
- Migrated codebase from AngularJS to Angular to make UI components reusable and easier to maintain
- Designed new Angular visualization components configurable without code for multiple data sources

Symbiont Health	Co - founder, CTO	Spring 2017 - Spring 2019
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- Designed and developed a Wi-Fi router-based fall detection device and an online analysis platform for caregivers
- Conducted customer interviews with professors, patients, and customers to improve end-user experience
- Raised over \$30,000 in seed funding from Do Good Challenge and Pitch Dingman Competition

University of Maryland	Student Facilitator	Fall 2018
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- Co-taught a 1-credit CS course next semester on leveraging machine learning to analyze healthcare related datasets
- Created lecture content to cover applications for different fields and code-labs in Python to apply new techniques

Next Century	Software Engineering Intern	Summer 2017
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- Built modular Polymer UI elements for the Darpa Memex deep-web data visualization and search tool
- Added export functionality to decrease search time by 400% and increase search results from 25 to over 10,000
- Refactored components into Polymer elements to create a single UI customizable for different domains

Dell Corporation	Software Engineering Trainee	Summer 2015
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- Optimized C applications on the system level to prevent stack overflow and network security attacks

PERSONAL PROJECTS

Parkinson's Telemonitoring	Python, Java, Firebase	2017
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- Android app that uses accelerometer and voice data to detect tremor severity and recommend follow-up actions

Capital 2 Go	Python, Java, AWS, Arduino	2017
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- Android app that uses NLP to convert voice input into a unique QR code to simplify cash withdrawal

Plane Crash WebGL Globe	Python, Java, JavaScript, HTML	2016
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- Modeled crash locations with high-fatality rates on an interactive 3D globe to identify patterns and hotspots

Fraudlytics	Python, Java, JavaScript, HTML	2016
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- Web visualization tool used to predict transaction integrity and hotspots for credit card fraud

AWARDS

1st Prize, Business School Pitch Dingman Competition	2018
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1st Prize, Do Good Challenge, Best Social Impact Venture	2018
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3rd Prize & Access to Care Winner, MedHacks	2017
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