

linkedin.com/in/kylefirst
github.com/kylefirst

Kyle Liu

(301) 275-1908
kylefirst@gmail.com
kyleliu.me

EDUCATION

University of Maryland College Park	B.S. Computer Science	Expected: May 2020
--	-----------------------	--------------------

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
--------------------	-----------------------------	--------------------

- 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
------------------------	-------------------	---------------------------

- 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
-------------------------------	---------------------	-----------

- 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
---------------------	-----------------------------	-------------

- 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
-------------------------	------------------------------	-------------

- Optimized C applications on the system level to prevent stack overflow and network security attacks

PERSONAL PROJECTS

Parkinson's Telemonitoring	Python, Java, Firebase	2017
-----------------------------------	------------------------	------

- 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
---------------------	----------------------------	------

- 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
--------------------------------	--------------------------------	------

- Modeled crash locations with high-fatality rates on an interactive 3D globe to identify patterns and hotspots

Fraudlytics	Python, Java, JavaScript, HTML	2016
--------------------	--------------------------------	------

- Web visualization tool used to predict transaction integrity and hotspots for credit card fraud

AWARDS

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