Allen Cheng

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EDUCATION

University of Maryland, College Park *College Park, MD* *Dec 2019*
Bachelor of Science, Computer Science. Bachelor of Science, Mathematics. GPA: 3.85/4.00
Minor, Business Analytics. Honors College, President's Scholarship

WORK EXPERIENCE

Airbnb, Inc.
Software Engineer *Seattle, WA* *Apr 2020 - Present*
Software Engineer Intern *Seattle, WA* *Jun 2019 – Aug 2019*
- Designed graph relationship-based features for anti-money laundering machine learning model.
- Implemented end-to-end ETL pipeline to export graph features on daily basis in Airflow. Paved system infrastructure using Spark Scala for iterative future development of additional graph features.
- Measured precision rate for new model features to be 50.0%, up from the existing model precision of 21.5%.

Lyft, Inc.
Software Engineer Intern *San Francisco, CA* *Sep 2018 – Dec 2018*
- Evaluated quality of third party realtime traffic data as ingested into rideshare ETA traffic pipeline.
- Practiced the data analysis lifecycle of implementing a pipeline in Apache Spark and Flink to ingress realtime data, using a trained machine learning model to score the data, and building a report with interactive visualizations.
- Implemented a Golang library to translate geospatial location data given translation rules sourced from a configuration system.

Facebook, Inc.
Software Engineer Intern, Instagram *New York, NY* *Jun 2018 – Aug 2018*
Software Engineer Intern *Seattle, WA* *Sep 2017 – Dec 2017*
- Migrated A/B experimentation platform to use a more robust configuration distribution and storage solution.
- Integrated internal infrastructure tooling within Nuclide, an open-source developer environment for web and native mobile development built on top of the Atom text editor, used by 87% of all Facebook developers.
- Initiated CPU profiling and trace collection from Nuclide's users to analyze Nuclide's performance data in production. Built reports and data feeds to drive optimizations for a sleeker UX using pipelines with Python.

AeroFS
Software Engineering Intern *Palo Alto, CA* *May 2017 – Aug 2017*
Y Combinator, Andreessen Horowitz backed startup building an enterprise file sync and share solution.
- Implemented scalable backend services for Amium, a collaborative document-based chat platform that transforms files into real-time activity feeds and conversations. Programming in Go and Java.
- Led the design of the scalable architecture of the data transformation ETL pipeline for Ruby on Rails application.
- Facilitated the analytics collection pipeline and using Elasticsearch to analyze data trends in user behavior using business intelligence to make informed marketing and product decisions.

University of Maryland – College Park
Student-Taught Course Facilitator *College Park, MD* *Jan 2018 – Dec 2019*
Undergraduate Teaching Assistant *College Park, MD* *Jan 2017 – May 2019*
- Designed and taught CMSC389K: Web Development w/ Node.js and CMSC389O: The Coding Interview.
- Synthesized a course curriculum and independently planned all lecture material and assignments.
- Led recitation classes to discuss and reinforce lecture material for CMSC216 – Introduction to Computer Systems.
- Obtained a evaluation rating of 3.92/4.00 from students for "overall effective teacher," compared to department average of 3.20/4.00.

Asymmetrik, Ltd.
Software Engineering Intern *Annapolis Junction, MD* *May 2016 – Jan 2017*
- Developed webapp components of *WildFire*, a platform for streaming Twitter analytics with MongoDB, Angular, and Node.js. Configured multi-node Amazon EC2 clusters on AWS with Red Hat Ansible.
- Piloted an ad hoc data analytics system with Apache Zeppelin notebooks utilizing Spark and Elasticsearch.

The Johns Hopkins University Applied Physics Laboratory
Software Engineering Intern *Laurel, MD* *Sep 2014 – Aug 2015*
- Developed a command line interface in Java for *Socrates*, a system for scalable graph data analytics with parallel processing. Significantly improved developer productivity and its user-friendliness.
- Created a technique for internal analysis of the effectiveness of employee-to-employee interaction within the same department versus within different departments.

LANGUAGES

Professional	*Proficient*	*Basic*
Java, Python, Scala	C, Golang, JavaScript, PHP, Ruby	OCaml, R