

# Allen Cheng

(443) 694-2051  
ac@allencheng.me  
www.allencheng.me

**EDUCATION** **University of Maryland, College Park** *College Park, MD* *Dec 2019*  
*Bachelor of Science, Computer Science and Mathematics. Minor, Business Analytics.* *GPA: 3.80/4.00*  
Honors College - University Honors, President's Scholarship

**WORK EXPERIENCE** **Lyft, Inc.**  
*Software Engineer Intern* *San Francisco, CA* *Sep 2018 - Dec 2018*

- Building data ingestion, processing, and retrieval applications.
- Integrating computer vision and other data analysis tools into a data pipeline.

**Facebook, Inc.**  
*Software Engineer Intern, Instagram* *New York, NY* *Jun 2018 - Aug 2018*  
*Software Engineer Intern* *Seattle, WA* *Sep 2017 - Dec 2017*

- Migrating 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.
- Created and designed Nuclide user interfaces and experiences using React and Node.js.

**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 collection and transformation ETL pipeline for a Ruby on Rails application, including investigating cost-effective solutions and building detailed analysis reports.
- 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 - May 2018*  
*Undergraduate Teaching Assistant* *College Park, MD* *Jan 2017 - May 2018*

- Designed and taught CMSC389K - Introduction to Web Development w/ Node.js under a faculty advisor.
- 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.
- Prepared instructional materials while proof-implementing class projects and proofreading quizzes and exams.
- Obtained a course evaluation rating of 3.92/4.00 from students for "overall effective teacher," compared to the department average of 3.20/4.00.

**Asymmetrik, Ltd.**  
*Software Engineering Intern* *Annapolis Junction, MD* *May 2016 - Jan 2017*

- Developed the web app component of *WildFire*, a platform for streaming realtime Twitter analytics using effective MongoDB, AngularJS, and Node.js.
- Piloted an ad hoc data analytics system with the Apache Zeppelin notebook structure, utilizing Spark and Elasticsearch. Generated interactive data visualizations with Scala, R, Python, and SparkSQL.
- Initiated collaboration with the *WildFire* team leads to provide data-informed feedback on new features using statistical reports generated with ggplot2, matplotlib, and Google Charts.
- Configured multi-node Amazon EC2 clusters on AWS with Red Hat Ansible. Managed configuration settings for machine provisioning and software deployment of *WildFire*.
- Participated in the software development life cycle with the Scrum methodology.

**The Johns Hopkins University Applied Physics Laboratory**  
*Software Engineering Intern* *Laurel, MD* *Jun 2015 - Aug 2015*  
*Large Scale Analytics Intern* *Laurel, MD* *Sep 2014 - May 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. Currently used by department supervisors.

**SKILLS** **Languages**  
*Professional:* Java, JavaScript, Python  
*Proficient:* C, PHP, Ruby  
*Basic:* C#, OCaml, R, Scala, SQL

**Tools and Technologies**  
AngularJS, Apache Spark, Django, Eclipse, Elasticsearch, Git, IntelliJ IDEA, JIRA, Mercurial, MongoDB, Node.js, Pandas