AARON YAO-SMITH

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Education	**Cornell University**, *Ithaca, NY*	August 2017 - Present

Computer Science, B.S. May 2021, GPA **3.800 / 4.000**
Data Structures & Funct. Progr. (CS 3110) · Algorithms (CS 4820) · Syst. Progr. (CS 3410)

Experience	**Amazon.com, Inc.**	May 2020 - Present
	Software Development Engineer (SDE) Intern	*Seattle, WA*

· Architect and implement microservice and web app interface enabling push-to-device of Kindle ad previews, for use by designers (**Java**, **Spring MVC**, **React/Redux**)

CoinFund LLC	May 2019 - August 2019
Software Engineer Intern	*New York, NY*

· Architected/developed new trading automation systems (**Golang**, **Apache Kafka**)
· System enables generalized automated strategy, replacing manual trading; reducing trading workload overhead by ∼5 hours/workweek, and enabling short-term strategy
· Maintained CI/CD to minimize time-to-market of new strategies (**CircleCI**, **Docker**)
· Wrote infrastructure to pipeline and collate trade information from ∼10 external HTTP/WS APIs to 1 endpoint in analysts' spreadsheets (**Python**, **Postgres**, **FRP**)

Singer Lab, Harvard Medical School	May 2018 - January 2019
Research Assistant, Computational Biology	*Boston, MA*

· Created COMET, a biostatistical analysis tool using novel statistical methodologies
· Tool predicts cell cluster using single-cell RNA sequencing data with >20% predictive error reduction over traditional t-test methods (**Python** pandas, matplotlib)
· Optimized algorithm continually: reducing >6 hour runtime down to 6 minutes

Projects	**'COMET: Identifying candidate marker panels..'** 2019

github.com/aaronyaosmith/comet-prototype

· Independently architected tool designed for use by cell biology researchers. Open beta available at cometsc.com. (**Flask**, **Python** pandas, matplotlib)
· Publication accepted in Molecular Systems Biology, presented poster at conference

'Incentive compatible disclosure' marketing study   2018
github.com/aaronyaosmith/icd-survey

· Independently implemented study as part of collaboration across 3 universities; interaction between subjects via web interface (**Django**, **Python** otree)
· Deployed to production single live experiment of 300 subjects in 2 hours (**Heroku**)

Leadership	**Operations/Tech Chair**	May 2019 - May 2020
	Cornell Taiwanese American Society	

· Oversee event setup/teardown, online presence: for club of 30 actives, 1300 on listserv

Subteam Lead/Project Manager	December 2018 - June 2019
AIDE, AguaClara Cornell	

· Managed sprint planning and overall direction for team of 4

Skills	Languages:	Go · Java · Python · JavaScript/ECMAScript (ES5 & ES6, TypeScript) HTML · CSS · C · C++ · OCaml · SQL
	Tools:	Spring MVC · Apache Kafka · Docker · AWS · Flask · Django · React Redux · Terraform · Packer · CircleCI · Heroku · PostgreSQL

Other interests	Guitar · Dance (Assorted Aces @ Cornell) · Cycling