AARON YAO-SMITH

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

Computer Science, B.S. May 2021, GPA **3.804 / 4.000**

Data Structures & Funct. Progr. (CS 3110) · Algorithms (CS 4820) · Syst. Progr. (CS 3410)

Experience	**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)
- Presented poster at conference, paper in review after minor revisions

'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 - Present

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

- Project manager for team of 4 handling overall direction and delegation
- Maintained parent team of 15's codebase CI/CD (**Travis**, **AppVeyor**)

Skills	Languages: Go · Python · JavaScript (ES6, TS) · HTML · CSS · Java · C · C++ · OCaml · SQL
	Tools: Flask · Django · Node.js · React · Apache Kafka · Docker · AWS Terraform · Packer · CircleCI · Heroku · PostgreSQL

Other interests	Delta Kappa Epsilon (PC President) · Guitar/Voice · Cycling