

ETHAN TU

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Experience

Alteryx Innovation Labs

Cambridge, MA

Software Engineer

November 2020 - Current

- Designed and developed the integration between Alteryx Machine Learning (AutoML cloud product currently in Limited Availability) and Alteryx Designer leading to 100% positive customer feedback and 1 presale
- Researched and developed a natural language inference classifier to be used in type inference with ~94% precision and ~95% recall
- Designed and contributed to open source libraries [Featuretools](#) and [Woodwork](#)

Alteryx Innovation Labs

Cambridge, MA

Software Engineer Intern

May 2020 - October 2020

- Developed machine learning feature selection algorithm to speed up Deep Feature Synthesis by 8%
- Designed testing strategy for distributed computing support of Koalas in [Featuretools](#)
- Designed and implemented performance tests for distributed computing support of Dask and Koalas in [Featuretools](#)

Google

Cambridge, MA

Software Engineer Intern

May 2019 - August 2019

- Added to existing data pipelines to create metrics that accurately portrayed a function's runtime
- Developed UI to visualize overall and AB experiments latency bottleneck data

Harvard Graduate School of Education

Cambridge, MA

Software Engineer

July 2018 - May 2019

- "[Relationships Between Body Postures and Collaborative Learning States in an Augmented Reality Study](#)", presented at [AEID 2020: Second Author](#)
- Developed cleaning algorithm for dyad Kinect data using unsupervised machine learning
- Feature engineered metrics between the movement of two people that significantly correlated with learning/collaboration indicators

Tufts CEEO

Medford, MA

Software Engineer Intern

January 2019 - January 2019

- Developed curriculum for the course "Intro to Computation for Engineers" in conjunction with Dr. Ethan Danahy
- Wrote step-by-step tutorials to make: Barcode scanning robot, a Snapchat filter, connecting multiple Raspberry Pi's to each other via private network

Open Fortress LLC

Medford, MA

Software Engineer Contractor

July 2018 - August 2018

- Designed and implemented full-stack application to detect analyze and store pairwise arbitrage opportunities across 6 different exchanges: Huobi, HadaX, Binance, Bittrex, Cryptopia, Kucoin, GDAX (now Coinbase Pro)
- Consulted with client to formalize requirements and iterated on solutions

Education

Tufts University

Medford, MA

BSCS Computer Science | GPA: 3.5/4

September 2017 - August 2020

Side Projects

International Cryptocurrency Arbitrage

December 2017 - February 2018

- Triangular arbitrage between South Korea and the USA using GDAX (now Coinbase Pro), Bithumb, Kakao and Bank of America
- Greater than 1000% profit within 3 months

Skills and Qualifications

Languages/Libraries: Python, Typescript, C, C++, SQL, GoLang, Git, AWS, React, MongoDB