

ETHAN TU

Software Engineer

Enthusiastic software engineer eager to contribute to team success through hard work, attention to detail and excellent organizational/documentation skills. Clear understanding of data science, web development and networks. I excel at understanding businesses needs to simplify problems/project designs.



Contact

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Skills

Python

C++

C

JavaScript

SQL

MongoDB

Networks

Machine Learning



Projects

- HTTP Proxy
tuethan1999.github.io/twitter-crypto
- Classroom Response System
tuethan1999.github.io/class-response
- Twitter bot that buys cryptocurrency
tuethan1999.github.io/twitter-crypto
- Cryptocurrency triangular arbitrage between South Korea and USA
>1000% profit within 3 months



Work History

2020-05 - Current

Feature Labs

Software Engineer/Algorithmic Research Intern, Boston, MA

- Developed novel machine learning algorithm to automatically extract and suggest features for relational datasets from dataset schema
- Contributed to May and June open source releases of [Featuretools](#) (main product)
- Wrote performance tests for distributed computing support of [Featuretools](#)

2019-05 - 2019-08

Google

Software Engineer Intern, Cambridge, MA

- Built profiler for the Display Ads front end to analyze latency bottlenecks. Lead to discovery of inefficient code taking 20% of time
- Created UI to visualize overall latency bottleneck data (Internal tools, SQL)
- Created UI to visualize AB experiments on latency bottleneck data (Google Colab, Python)

2018-07 - 2019-05

Harvard University, Graduate School of Education

Software Engineer/Data Scientist, Cambridge, MA

- *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 (Jupyter Notebook, Scikit-learn)
- Created metrics across dyads that significantly correlated with learning/collaboration indicators
- Created plots and animations to view Kinect data (PIL/Matplotlib)

2019-01 - 2019-01

Tufts Center for Engineering Education Outreach

Software Engineer/Curriculum Developer, Medford, MA

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

2018-07 - 2018-08

Open Fortress LLC

Software Engineer/Data Scientist, Medford, MA

- Conferred with client assess requirements and propose optimal solutions
- Built backend to detect, analyze, and store pairwise arbitrage opportunities across cryptocurrency exchanges (Huobi, HadaX, Binance, Bittrex, Cryptopia, Kucoin, GDAX) (Node.JS/MongoDB/Heroku)



Education

2017-09 - 2020-08

Tufts University: Bachelor of Engineering

Computer Science - Medford, MA

GPA:3.5

Relevant coursework: Machine Learning, Networks, Computation Theory, Mathematical Aspects of Data, Probabilistic Systems, Numerical Linear Algebra, Human Computer Interaction, Digital Circuits, Programming Languages



Online Courses/Certifications

2019-01

Launching into Machine Learning – tuethan1999.github.io/cert1

2019-01

How Google does Machine Learning – tuethan1999.github.io/cert2

Machine Learning by Andrew Ng - Audit