

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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WWW

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Skills

Python

C++

C

Javascript

SQL

MongoDB

Networks

Machine Learning



Projects

- HTTP Proxy
<https://github.com/tuethan1999/HighPerformanceHTTPProxy>
- Classroom Response System
<https://github.com/jonghoonlee98/ClassroomResponse>
- Bot that buys cryptocurrency off of tweets
<https://github.com/tuethan1999/twitter-crypto-buy>
- 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 new machine learning algorithm to suggest features for relational datasets using only the dataset schema
- Contributed to May and June open source releases of Featuretools (main product).
- Wrote performance tests for distributed computing support of Featuretools on AWS EC2

2019-05 - 2019-08

Google

Software Engineer Intern, Cambridge, MA

- Built profiler for the Display Ads front end to analyze latency bottlenecks
- 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 Graduate School of Education

Software Engineer/Data Scientist, Cambridge, MA

- Wrote paper presented at AEID 2020: <https://rdcu.be/b5UnW>
- Machine Learning: Developed cleaning algorithm for dyad Kinect data using unsupervised machine learning (Jupyter Notebook, Scikit-learn)
- Data Visualization: Created plots and animations to view Kinect data (PIL/Matplotlib)
- Feature engineering- created metrics across dyads that significantly correlated with learning/collaboration indicators.

2019-01 - 2019-01

Tufts Center for Engineering Education Outreach

Software Engineer/Curriculum Developer, Medford, MA

- Worked with Dr. Ethan Danahy to create the curriculum for the course "Intro to Computation for Engineers" (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

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



Online Courses/Certifications

Launching into Machine Learning - <https://tinyurl.com/yg3o3fj5>

How Google does Machine Learning - <https://tinyurl.com/ygoxsuvk>

Machine Learning by Andrew Ng - Audit