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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Phone

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Website

tuethan1999.github.io

LinkedIn

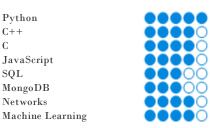
Linkedin.com/in/ethantu

E-mail

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Skills



Projects

- High Performance HTTP Proxy tuethan1999.github.io/http-proxy
- Classroom Response System github.com/jonghoonlee98/ClassroomResponse
- 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

2019-05 - 2019-08

2018-07 - 2019-05

2019-01 - 2019-01

2018-07 - 2018-08

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 <u>Featuretools</u> (main product)
- Wrote performance tests for distributed computing support of Featuretools

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)

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 tinyurl.com/y6e6eq4a
- 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)

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

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

 $Computer\ Science\ \hbox{-}\ \operatorname{Medford},\ \operatorname{MA}$

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 2019-01 Launching into Machine Learning – tinyurl.com/yg303fj5

How Google does Machine Learning – tinyurl.com/ygoxsuvk

Machine Learning by Andrew Ng - Audit

Last updated: 08.25.2020