ETHAN **TU**

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SUMMARY

Software Engineer with strong data structure and algorithm fundamentals and proficient in multiple programming languages. Easily picks up new technologies and is eager to learn!

EDUCATION AND TRAINING

Expected in 12/2020 **Bachelor of Engineering**: Computer Science/Math
Tufts University – Medford, MA
GPA: 3.57
Courses: |Senior Capstone, Programming Languages, Digital Electronics, Entrepreneurship Finance|Computation Theory, Circuits and Electrical Systems| Machine Learning, Networks, Mathematical Aspects of Data, Probabilistic Systems, Numerical Linear Algebra, Human Computer Interaction| Discrete Math, Algorithms, Game Theory, Machine Structure and Programming, Linear Algebra, Entrepreneurship & Business Planning| Data Structures, Web Programming, Intro to MATLAB, Calculus 3| Physics Electricity and Magnetism, Calculus 2, Simple Robotics

Online Courses
Google Cloud Coursera:
- Launching into Machine Learning - https://tinyurl.com/yg3o3fj5
- How Google does Machine Learning - https://tinyurl.com/ygoxsuvk

Edx: "Intro to Python for Data Science"

EXPERIENCE

05/2019 to 08/2019 **Software Engineer Intern (SWE)**
Google – Cambridge, MA
Built profiler for the Display Ads front end to analyze latency bottlenecks
- Contributed to data processing pipeline (C++, Internal tools)
- Created UI to visualize overall latency bottleneck data (Internal tools, SQL)
- Created UI to visualize AB experiments on latency bottleneck data (Google Colab, Python)

07/2018 to 05/2019 **Data Scientist/Software Engineer**
Harvard Graduate School Of Education – Cambridge, MA
Cleaned and analyzed Kinect data to find the impact of augmented reality on the relationship between dyad(pairwise) body postures and learning/collaboration indicators.
- Data Visualization- Created plots and animations to view Kinect data (PIL/Matplotlib)
- ML- Developed cleaning algorithm for dyad Kinect data using unsupervised machine learning (Jupyter Notebook, Scikit-learn)
- Feature engineering- created metrics across dyads that significantly correlated with learning/collaboration indicators

07/2018 to 08/2018 **Data Scientist/Software Engineer**
Open Fortress LLC – Medford, MA
- Built backend to detect, analyze, and store pairwise arbitrage opportunities across cryptocurrency exchanges (Huobi, Hadax, Binance, Bittrex, Cryptopia, Kucoin, GDAX) (Node.JS/MongoDB/Heroku)

01/2019 to 01/2019 **Curriculum Developer**
Tufts CEEO – Medford, MA
Worked with Dr. Ethan Danahy to create the curriculum for the course "Intro to Computation for Engineers" (Python, Raspberry Pi, OpenCV)

SKILLS

- Languages: Python, C, C++, SQL, NodeJS, MATLAB, Javascript/HTML/CSS
- Databases: MongoDB
- Software: Jupyter Notebooks, Django, Pandas, Scikit-learn, Heroku, Git, Latex

PROJECTS

- Cryptocurrency triangular arbitrage between South Korea and USA >1000% profit within 3 months
- Bot that buys cryptocurrency off of tweets https://github.com/tuethan1999/twitter-crypto-buy
- Portfolio idea with vanilla javascript https://github.com/tuethan1999/portfolio_template
- tuethan1999@github.io