TOMMY WHITE

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♀ Town, ST

• websurfin

% tommy-w.com/

EXPERIENCE

Research Assistant

Dartmouth College/Dartmouth Security and Al Lab

March 2021 - March 2021

- Developed and formalized novel algorithms in the fields of Collective Classification and Graph Neural Networks.
- Applied these algorithms to Social Network prediction problems.
- Managed datasets with terabytes of data as well as the dozens of computation jobs used to process and analyze this data.

Software Engineering Internship Amazon.com

San Luis Obispo, CA

- Worked as part of an Amazon Prime server team; my code has directly affected millions of transactions.
- Redeveloped the code deployment pipeline and rollback system to enable my team to quickly recover from issues in production code.
- Developed API to facilitate automatic upselling of Prime memberships to customers based on their current membership status, region, and other factors.

PROJECTS

Social Network Analysis for Cryptocurrency Price Prediction **Dartmouth Security and Al Lab**

- ## Feb. 2019 March 2021
- Developed algorithms to predict future prices of top cryptocurrencies by analyzing massive amounts of social media data.
- Organized and monitored tens of thousands of hours of computation time to complete the experiments.
- Presented results at 2019 IEEE International Conference on Blockchain and Cryptocurrencies in Atlanta, GA.

Counter-terrorism Graph Time Series Analysis **Dartmouth Security and Al Lab**

- m Oct. 2018 March 2021
- Explored prediction problems in a social network styled dataset which included thousands of terrorists and hundreds of terroristic factions as members.
- Improved predictive performance by generating novel features based on centrality, flow, and balance metrics.
- Primarily usied centrality metrics across monthly subnetworks of terrorist factions.

See more of my experience/projects at tommy-w.com/

EDUCATION

M.S. in Computer Science Dartmouth College, Hanover, NH

- Projected December 2021
- Research work focused on machine learning as applied to social networks.
- Coursework focused on machine learning, cryptography, and math-heavy applications of CS.

B.S. in Computer Science Cal Poly, San Luis Obispo, CA

- ⊙ Graduated with honors (3.7 GPA).
- Completed interdisciplinary minor in Data Science supervised by Professors Alex Dekhtyar and Dennis Sun.
- Undergraduate studies were tailored to get a background in machine learning, software engineering, and statistics.

SKILLS

Python Pandas, Numpy Pytorch, Scipy, SKLearn Latex, Markdown

Java C/C++

Git R/ggplot JavaScript

TECHNICAL SKILLS

Build Systems Experience

Command Line Tools

Data Aggregation and Cleaning

Data Scraping Deep Learning

Functional Programming

Large Scale Computation

Object-Oriented Programming

Parallel Computing | Software Design

Statistical Modeling and Testing