Timothy Wang

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EDUCATION

University of Maryland, College Park **College Park, MD**

B.Sc., Computer Science, **GPA: 3.99/4.0,** ACES Honors College, QUEST, Presidential Scholar May 2020

EXPERIENCE

Lyft - Software Engineering Intern Aug – Nov 2019

- Designed and implemented a parallelized system with Python, Pandas, and Flyte to efficiently calculate driver ETAs, used throughout all of Lyft's core products, that reduced error by 20%
- Built machine learning accuracy verification system to monitor and validate any infrastructure changes

Bloomberg LP - Software Engineering Intern May – Aug 2019

- Designed and built Spark featurization pipelines from scratch in Python that process billions of financial securities
- Developed and deployed online-learnable anomaly detection machine learning algorithms with Python, Pandas, and Apache Kafka
- Researched and implemented advanced sampling methods and unsupervised learning algorithms

Mastercard (Applied Predictive Technologies) - Software Engineering Intern June – Aug 2018

- Implemented statistical models with SQL and C# that process over 40% of all credit card transactions in the world
- Developed clustering, hill-climbing, and genetic algorithms to better generate control groups
- Leveraged React, Redux, Saga and C# to implement a more iterative workflow for creating statistical models

Sift– Machine Learning Intern June – Aug 2017

- Implemented distributed and scalable Naïve Bayes text classification models in Java that process ~12TB of data
- Parallelized offline training pipeline with MapReduce that improved feature extraction runtimes by 95%

SKILLS & COURSEWORK

- **Coursework:** Databases, Algorithms, Concurrency, Software Engineering, Machine Learning, Natural Language Processing, Data Science, Data Structures, Computer Systems, OOP, Discrete Structures, Linear Algebra, Unix
- **Programming:** Java, Python, SQL, Spark, Git, Pandas, C#, MapReduce, JavaScript, Hadoop, C, Unix, Flink, Kafka

RESEARCH & SELECTED PROJECTS

Covid-19 Analysis Project Mar 2020

- Python web app to accumulate all of the world's data on Covid19 under one schema: timothyxwang.com/covid

University of Maryland Department of Computer Science Jan 2017 – Jan 2019

- Undergraduate TA for Algorithms (Spring, Fall 2018) under Professor Evan Golub and Professor Clyde Kruskal
- Undergraduate TA for Advanced Java and Data Structures (Spring 2017) under Professor Tom Reinhardt

Dynamic Reconfiguration of Computer Systems Sept 2017 – Jan 2019

- Researched self-learning, software defined networking systems under Professor Jim Purtilo

Bipartisan Feb 2017

- Python web app to filter credible news using sklearn, nltk, and Stanford's CoreNLP library