Timothy X. Wang

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EDUCATION

University of Maryland, College Park- GPA: 4.0/4.0

College Park, MD

Bachelor of Science in Computer Science & Mathematics

May 2020

Honors College | Advanced Cybersecurity Experience for Students | Presidential Scholar | National Merit Finalist

SKILLS

Java, Python, C#, C, Windows, Linux, SQL, Bootstrap, C++, JavaScript, HTML, CSS, Matlab, Bash, MS SQLServer, AWS

EXPERIENCE

University of Maryland, College Park

College Park, MD

Undergraduate Teaching Assistant for CMSC132- Advanced Java and Data Structures

Jan 2017- Current

- Lead 2 recitations per week where I reinforced classroom concepts and introduced new material
- Hold multiple office hours a week to address individual questions from students

Cipher Systems Annapolis, MD

Software Development Intern

Dec 2016 - Current

- Developing Java microservice using Stanford's CoreNLP library to replicate and customize IBM's AlchemyAPI's Natural Language Processing services
- Migrated Apache SOLR backend databases to AmazonS3 and updated software infrastructure to interface with AWS

ContentAnalytics Inc. San Francisco, CA

Software Engineering Intern, Core Engineering Team

Oct 2016- Jan 2017

- Developed image and video processing software to measure and improve E-Commerce for multiple Fortune 500 companies
- Engineered a data transfer pipeline between Amazon S3 and Adobe's Scene7 to facilitate future cloud services

University of Maryland, College Park

College Park, MD

Undergraduate Research Fellow, Departments of Computer Science and Math

May - Oct 2016

- Optimized Pollard's Rho algorithm by approximately 1200% by implementing an exponentially growing cycle detection method and streamlining rate of comparisons
- Proved via Monte Carlo analysis that our algorithm outperforms all special-purpose algorithms for semi-primes $< 2^{70}$

PROJECTS

Feb 2017 **Bipartisan**

- Bipartisan is a web application that combats misinformation by leveraging machine learning to filter credible news
- Created web parser and natural language processing pipeline to extract sentiment analysis, entities, and N-grams from news articles
- Wrote scripts that utilized NewsAPI and Microsoft's Bing API to stream in thousands of news articles a minute

sagaciousAnalytics- A Machine Learning platform to help Engineer Smarter Promotions

Jan 2017- Present

• A Neural Network implemented in Python that uses emotion detection to analyze effectiveness of advertisements

Virtuoso- A Facebook Messenger Assistant

Dec 2016- Present

- Created a chat bot using Python, Flask, MySQL and deployed via Heroku that can follow and learn commands
- Developed Natural Language Processing functionality that supports Microsoft's Text Analysis API

Method to the Madness (Big Red // Hacks @ Cornell University)

Sep 2016

• Programmed a forward feeding Neural Network in Java that predicts March Madness collegiate basketball results

CLUBS & ACTIVITIES

Consult Your Community

College Park, MD

• Provide pro-bono consulting services to Spotluck, a restaurant technology start-up aiming to access the college market