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's 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

Bipartisan **Feb 2017**

- 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