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# **EDUCATION**

BA IN COMPUTER SCIENCE AND MATHEMATICS

### **OBERLIN COLLEGE**

Expected May 2021 | Oberlin, OH Concentration in Statistical Modeling Minor in Economics

Major GPA 3.85/4.00 Overall GPA: 3.84/4.00

## **SKILLS**

### **PROGRAMMING**

Advanced:

Python • Java • Cython

• MFX

#### Intermediate:

C • R • Bash • SQL

### **TOOLS AND FRAMEWORKS**

Pandas • Numpy • Keras

• Tensorflow • Flask

## **COURSEWORK**

Advanced Algorithms
Data Structures
Discrete Mathematics
Artificial Intelligence
Linear Algebra
Machine Learning
Statistical Modelling

# INTERESTS

Machine Learning
Anime
Algorithmic Game Theory
Bayesian Statistics
Multi-Agent Systems
Quantum Computation
Behavioral Economics

## **EXPERIENCE**

# MORGAN STANLEY | QUANTITATIVE STRATEGIES AND MODELLING INTERN May 2019 - Aug 2019 | New York, NY

- Researched and created a statistical model of order flows in the Agency MBS TBA market using Python, Numpy and Pandas
- Designed and implemented data processing pipelines to improve the efficiency of the Agency MBS desk in **Q/kdb+**
- Developed trading algorithms around my model that could generate \$13M in profits over 2 years

## TWO SIGMA | SOFTWARE ENGINEERING INTERN

May 2018 - Aug 2018 | Houston, TX

- Developed and implemented a payment gateway in **Java** compliant with the SWIFT protocol that simplified the transfer of money to our margin providers.
- Designed front-end web and excel interfaces to the service that displayed data and analytics for diagnosing and preventing errors in wire transfers.
- The service is utilized over 550+ times per week to transfer \$4.5B weekly.

## **TEEVO | SOFTWARE ENGINEER**

Sep 2016 - Mar 2017 | Lagos, Nigeria

- Developed Palm Tasks an internal software tool used by office administrators to track and improve employee productivity and task management, using Python, MongoDB, Flask/Jinja2 and HTML/CSS/JS which increased productivity 20% (measured by tasks completed).
- Applied data analytics and machine learning for the generation of ideas to
  increase engagement and retention of teenagers on the Teevo suite of (mobile
  and online) products, using Numpy, Pandas and Scikit-learn which enabled the
  company to grow its user ship 100% per month.

## RESEARCH

### ALGORITHMIC GAME THEORY | RESEARCHER

Sep 2018 - Present. | Oberlin College Computer Science Department

- Engaged in paid research under supervision from professor Jane Doe
- Studied the equilibria of First Price Auctions with low welfare.
- Developed and implemented numerical techniques for optimizing worst case first price auction instances.

## **DISTRIBUTED COMPUTING | RESEARCHER**

Jan 2018 - Feb 2018 | Oberlin College Winter Term

- Overhauled supercomputer nodes by replacing hardware, installing operating systems and implementing distributed computing frameworks with Spark.
- Implemented a distributed version of linear regression using functional programming through Scala.

# **ACTIVITIES AND LEADERSHIP**

**Nov 2018 - Present** Computer Science Majors Committee (Member)

Sep 2017 - Present African Students Association (ASA)

Sep 2017 - Present Computer Science and Hackathon Club (President & Founder)

## AWARDS AND RECOGNITION

2019 top 10% Tapia Scholarship Recipient

2016 1st/1000 Teevo Special Recognition for Innovation Award