# Roy N. Wu

SOFTWARE ENGINEER

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#### **EXPERIENCE**

New York, NY

Jul 2022

Twitter, Inc.

Incoming Software Engineer

New York, NY

Cisco Systems, Inc.

Jun 2021 - May 2022

Software Engineer Intern

- Architecting a complex NoSQL data conversion and data migration automation project for a Webex platform using Java, Spring Boot, and MongoDB
- Developed a back-end framework using Python that integrates with ISE REST API to allow XML imports to the Cisco ISE UI, successfully automating a manual task that would take over 8 hours to process in under 1 minute
- · Nominated and awarded "Intern of the Month" for outstanding performance and positive team-player attitude

Chicago, IL

#### William Blair & Company, LLC.

Jan 2021 - May 2021

- Data Science Intern
   Designed and built an ETL pipeline solution in Databricks with Python and Spark that extracts and stores data from Office 365 products using Microsoft Graph REST API, improving data accuracy and consistency
- Built a social network graph with Python and implemented custom centrality and community detection algorithms; used as the base model for in-house relationship intelligence solution

Boulder, CO

#### The Trade Desk, Inc.

Jun 2020 - Aug 2020

Data Science Intern

- Developed a new lookalike modeling feature with Spark and Scala in AWS, allowing users to customize inputs to the ad campaign optimization algorithm
- Analyzed 10<sup>8</sup>+ rows of unexplored ad group data in Vertica SQL and prototyped a custom multi-target linear regression
  model with Python to predict various KPIs, which launched company-wide and increased ad group performance by 74%

New York, NY

Vitech Systems Group, Inc.

Jun 2018 - Jul 2019 Jun 2017 - Jun 2018 Solutions Analyst

- Associate Solutions Analyst
- Collaborated with tech leads to design extensive workflow processes and write new software design documents, advanced functional specifications, and enhancement contracts
- Self taught PL/SQL and worked with engineers to write and maintain SQL scripts for extracting reoccurring test cases, cutting down regression testing time by 25%

New York, NY

#### **Haver Analytics, Inc.**

Sep 2016 - May 2017

Senior Economic Research Assistant

 Compiled, managed, and quality assured databases covering macroeconomic indicators of Asia-Pacific markets and automated the extraction and formatting of data with DOS

## **EDUCATION**

Philadelphia, PA

University of Pennsylvania

Aug 2019 - May 2022 Aug 2019 - May 2022 Master of Science in Engineering, Computer and Information Science

Master of Science in Engineering, Data Science

Coursework: Software Systems, Software Foundations, Analysis of Algorithms, Big Data Analytics, Machine Learning,
 Deep Learning, Artificial Intelligence, Computer Vision, Computational Linguistics, Time Series Forecasting

New York, NY

## **New York University**

Aug 2013 - May 2017 Aug 2013 - May 2017 Bachelor of Arts, Mathematics Bachelor of Arts, Economics

· Honors: Dean's List (2015, 2016)

# **♀** ACHIEVEMENTS

2022 | Terminal - East Coast Regional Spring 2022: Selected to compete in AI game competition presented by Citadel LLC

2021 The Data Open - East Coast Regional Fall 2021: Selected to compete in datathon competition presented by Citadel LLC

2017 University Honors Scholar + NYU Founders' Day Award: Graduated as a top-ranking Baccalaureate candidate

2016 SOA Exam P: Probability/CAS Exam 1: Among 1109 (44.4%) candidates who passed during May 2016 administration

# <⇒ SKILLS

Programming

Python · Java · C/C++ · Scala

Tools/Frameworks

SQL · NoSQL · Spring Boot · Docker · Git · PyTorch · Apache Spark · Azure Databricks · AWS · GCP

Languages

English (Native) · Mandarin Chinese (Fluent)