

Roy N. Wu

SOFTWARE ENGINEER

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EXPERIENCE

New York, NY Jul 2022	Twitter, Inc. <i>Incoming Software Engineer</i>
New York, NY Jun 2021 - May 2022	Cisco Systems, Inc. <i>Software Engineer Intern</i> <ul style="list-style-type: none">Architecting a complex NoSQL data conversion and data migration automation project for a Webex platform using Java, Spring Boot, and MongoDBDeveloped 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 minuteNominated and awarded "Intern of the Month" for outstanding performance and positive team-player attitude
Chicago, IL Jan 2021 - May 2021	William Blair & Company, LLC. <i>Data Science Intern</i> <ul style="list-style-type: none">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 consistencyBuilt 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 Jun 2020 - Aug 2020	The Trade Desk, Inc. <i>Data Science Intern</i> <ul style="list-style-type: none">Developed a new lookalike modeling feature with Spark and Scala in AWS, allowing users to customize inputs to the ad campaign optimization algorithmAnalyzed 10^8+ 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 Jun 2018 - Jul 2019 Jun 2017 - Jun 2018	Vitech Systems Group, Inc. <i>Solutions Analyst</i> <i>Associate Solutions Analyst</i> <ul style="list-style-type: none">Collaborated with tech leads to design extensive workflow processes and write new software design documents, advanced functional specifications, and enhancement contractsSelf 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 Sep 2016 - May 2017	Haver Analytics, Inc. <i>Economic Research Assistant</i> <ul style="list-style-type: none">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 Aug 2019 - May 2022 Aug 2019 - May 2022	University of Pennsylvania <i>Master of Science in Engineering, Computer and Information Science</i> <i>Master of Science in Engineering, Data Science</i> <ul style="list-style-type: none">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 Aug 2013 - May 2017 Aug 2013 - May 2017	New York University <i>Bachelor of Arts, Mathematics</i> <i>Bachelor of Arts, Economics</i> <ul style="list-style-type: none">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 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)