

# Roy N. Wu

SOFTWARE ENGINEER

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## EXPERIENCE

New York, NY Jul 2022	<b>Twitter, Inc.</b> <i>Incoming Software Engineer</i>
New York, NY Jun 2021 - Present	<b>Cisco Systems, Inc.</b> <i>Software Engineer Intern</i> <ul style="list-style-type: none"><li>Architecting an end-to-end complex data conversion and data migration within a microservices infrastructure using <a href="#">Java</a>, <a href="#">Spring Boot</a>, and <a href="#">MongoDB</a></li><li>Developed a back-end framework using <a href="#">Python</a> that integrates with ISE REST API to allow XML imports to the Cisco ISE UI, automating a manual task that would take over 8 hours to process in under 1 minute</li><li>Nominated and awarded "Intern of the Month" for positive team-player attitude and outstanding performance</li></ul>
Chicago, IL Jan 2021 - May 2021	<b>William Blair &amp; Company, LLC.</b> <i>Data Science Intern</i> <ul style="list-style-type: none"><li>Designed and built an ETL pipeline solution in <a href="#">Databricks</a> with <a href="#">Python</a> and <a href="#">Spark</a> that extracts and stores data from Office 365 products using Microsoft Graph REST API, improving data accuracy and consistency</li><li>Built a social network graph with <a href="#">Python</a> and implemented custom centrality and community detection algorithms; used as the base model for in-house relationship intelligence solution</li></ul>
Boulder, CO Jun 2020 - Aug 2020	<b>The Trade Desk, Inc.</b> <i>Data Science Intern</i> <ul style="list-style-type: none"><li>Developed a new lookalike modeling feature with <a href="#">Spark</a> and <a href="#">Scala</a> in <a href="#">AWS</a>; this long-awaited function allowed users to customize inputs to the ad campaign optimization algorithm</li><li>Analyzed <math>10^8</math>+ rows of unexplored ad group data in <a href="#">Vertica SQL</a> and prototyped a custom multi-target linear regression model with <a href="#">Python</a> to predict various KPIs, which launched company-wide and increased ad group performance by 74%</li></ul>
New York, NY Jun 2018 - Jul 2019 Jun 2017 - Jun 2018	<b>Vitech Systems Group, Inc.</b> <i>Solutions Analyst</i> <i>Associate Solutions Analyst</i> <ul style="list-style-type: none"><li>Collaborated with tech leads to design extensive workflow processes and write new software design documents, advanced functional specifications, and enhancement contracts</li><li>Self taught <a href="#">PL/SQL</a> and worked with engineers to write and maintain <a href="#">SQL</a> scripts for extracting reoccurring test cases, cutting down regression testing time by 25%</li></ul>
New York, NY Sep 2016 - May 2017	<b>Haver Analytics, Inc.</b> <i>Economic Research Assistant</i> <ul style="list-style-type: none"><li>Compiled, managed, and quality assured databases covering macroeconomic indicators of Asia-Pacific markets and automated the extraction and formatting of data with <a href="#">DOS</a></li></ul>

## EDUCATION

Philadelphia, PA Aug 2019 - May 2022 Aug 2019 - May 2022	<b>University of Pennsylvania</b> <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"><li><b>Coursework:</b> Software Systems, Software Foundations, Analysis of Algorithms, Big Data Analytics, Machine Learning, Deep Learning, Artificial Intelligence, Computer Vision, Computational Linguistics, Time Series Forecasting</li></ul>
New York, NY Aug 2013 - May 2017 Aug 2013 - May 2017	<b>New York University</b> <i>Bachelor of Arts, Mathematics</i> <i>Bachelor of Arts, Economics</i> <ul style="list-style-type: none"><li><b>Honors:</b> Dean's List (2015, 2016)</li></ul>

## ACHIEVEMENTS

2022	<b>Terminal - East Coast Regional Spring 2022:</b> Selected to compete in AI game competition presented by Citadel
2021	<b>The Data Open - East Coast Regional Fall 2021:</b> Selected to compete in datathon competition presented by Citadel
2017	<b>University Honors Scholar + NYU Founders' Day Award:</b> Graduated as a top-ranking Baccalaureate candidate
2016	<b>SOA Exam P: Probability/CAS Exam 1:</b> Passed

## SKILLS

<b>Programming</b>	Python · Java · C/C++ · Scala
<b>Tools/Frameworks</b>	SQL · MongoDB · Spring Boot · Docker · Git · PyTorch · Apache Spark · Azure Databricks · AWS · GCP
<b>Languages</b>	English (Native) · Mandarin Chinese (Fluent)