# Roy N. Wu

M.S.E. IN DATA SCIENCE @ UNIVERSITY OF PENNSYLVANIA

https://roynwu.github.io 다

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O github.com/roynwu

#### **EDUCATION**

## Philadelphia, PA

#### University of Pennsylvania

Expected May 2021

MASTER OF SCIENCE IN ENGINEERING IN DATA SCIENCE, CONCENTRATION IN COMPUTER VISION

- · Courses: Algorithms, Big Data, Machine Learning, Deep Learning, Computer Vision, Artificial Intelligence
- · Leadership: Data Science General Assembly, Penn Data Science Group Board (Partnership Team)

### New York, NY

#### New York University

Aug 2013 - May 2017

BACHELOR OF ARTS IN MATHEMATICS AND ECONOMICS

· Honors: Dean's List, University Honors Scholar (Founders' Day Award)

#### Experience

# Boulder, CO\*

#### The Trade Desk

Jun 2020 - Aug 2020

Data Science Intern

- · Optimization: build models that determine what combinations of different types of ads perform best
- · Prediction: build models to predict advertisers' likelihood of winning auctions to finalize their strategy
- · Experimental design: measure the impact of any changes we introduce to our optimization models

### \*REMOTE DUE TO COVID-19

#### New York, NY Vitech Systems Group

Solutions Analyst

Jun 2018 - Jul 2019 Jun 2017 - May 2018

Associate Solutions Analyst

- · Served as main liaison between engineering team and clients on agile-based software development projects
- · Managed server & client databases for performing data analysis and resolving data issues [PL/SQL]
- · Collaborated with tech leads to design extensive workflow processes and write new software design documents, advanced functional specifications, and enhancement contracts
- · Delivered optimal software solutions via in-depth quality assurance of modifications and defect fixes
- · Mentored new hires and led training seminars covering domain knowledge and best industry practices

#### New York, NY

#### **Haver Analytics**

Sep 2016 - May 2017

ECONOMIC RESEARCH INTERN

- · Compiled, managed, and quality-assured databases covering macroeconomic indicators of Asia-Pacific markets and delivered data upon each release to clients
- · Performed statistical analysis on time series data to provide insights into historical market trends [Stata]
- Added new time series data to server & client databases and automated data extraction/formatting [DOS]

### New York, NY

### PrimeAlpha

Oct 2014 - Feb 2015

Project Manager Intern

- · Managed various projects, such as conducting investor due diligence and developing marketing campaigns
- · Oversaw and performed detailed software functionality, usability, and interface testing activities

# PROJECTS (MORE > https://github.com/roynwu)

### NLP

Headline Writer: Abstractive Text Summarization with Attention and Pointer-Generator Network

Jan 2020 - May 2020

Henglin Wu, Ruilin Zhao, Roy Wu, Chenyuan Li

[paper] [code] [slides] [youtube]

Roy Wu, Riley Xu, Tianhao Lu

Developed an advanced Seq2Seq model that automates generation of news article summary headlines

# Computer Vision

Jan 2020 - May 2020

Artificial Anime Character Design: An Application of Generative Adversarial Networks (GANs)

[paper] [code] [slides]

Built various GANs with improved training techniques to create artificial face designs of anime characters

# SKILLS

Programming ML/DL Libraries

Python · SQL (MySQL, Oracle) · Java

 $PyTorch \cdot Scikit-Learn \cdot NumPy \cdot Pandas \cdot Matplotlib \cdot Seaborn$ 

**Technologies** 

 $\label{eq:continuous} Jupyter \cdot Apache \ Spark \cdot AWS \cdot GitHub \cdot Docker \cdot \LaTeX$ 

Others

Actuarial Exams: SOA Exam P/CAS Exam 1 · Languages: Chinese · Video: Final Cut Pro, HitFilm