Roy N. **Wu**

M.S.E. in Data Science @ University of Pennsylvania

https://roynwu.github.io

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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 - Performance Automation Team
	· Worked with engineers to productionize and scale advertising campaign optimization algorithms
	· Developed a new algorithm that supports lookalike modeling for a custom optimization feature that allows users to include multiple conversion pixels [Spark-Scala] [SQL] [AWS (EMR, S3)]
	· Owned the design and implementation of a new predictive model for the AI recommendation tool; increased ad group performance by 45% and reduced error by 58% on average across all KPI goals [Python] [SQL]
New York, NY	**Vitech Systems Group**
Jun 2018 - Jul 2019	Solutions Analyst
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 [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
	· 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] [blog] [youtube]
	Developed an advanced Seq2Seq model that automates generation of news article summary headlines
Computer Vision	**Artificial Anime Character Design: An Application of Generative Adversarial Networks (GANs)**
Jan 2020 - May 2020	**Roy Wu**, Riley Xu, Tianhao Lu
	[paper] [code] [blog]
	Built various GANs with improved training techniques to create artificial face designs of anime characters

SKILLS

Programming	Python · SQL · Scala · Java
ML/DL Libraries	PyTorch · Scikit-Learn · NumPy · Pandas · Matplotlib
Technologies	Apache Spark · AWS · Git · LaTeX
Others	Actuarial Exams: SOA Exam P/CAS Exam 1 · Languages: Chinese · Video: Final Cut Pro, HitFilm