WONKWON LEE

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EDUCATION

New York University   New York, NY
M.S. in Computer Science   05/2023
Awards & Honors: Wasserman Career Grant   GPA: 3.48
Relevant Coursework: Computer Vision, Natural Language Processing, Responsible Data
     Science, Data Science for Healthcare, Advanced Database Systems

University of Manchester   Manchester, UK
B.S. in Computer Science and Mathematics   06/2018
Awards & Honors: International Mathematics Merit Scholarship   Upper-Second Class Honors
Relevant Coursework: Machine Learning, Convex Optimization, Linear Algebra, Graph Theory

RESEARCH EXPERIENCE

New York University, Center for Responsible AI   New York, NY
Graduate Research Assistant   09/2022 – 05/2023
- Conducted research in Differentially Private synthetic data generation under Professor Julia Stoyanovich using various DP synthesizers and comparing statistical distributions, contributing to a publication in PVLDB Vol. 16
- Achieved Best Paper Runner-Up Award for the Experiment, Analysis, & Benchmark Track in VLDB2023 and SIGMOD 2024 Highlight award
- Replicated ICPSR papers with public data and privatized data and assess the loss to evaluate various DP methods

New York University, McDevitt Lab   New York, NY
Graduate Research Assistant   10/2021 – 02/2022
- Performed diagnostic prediction modeling research for the Colgate Project under Professor John T. McDevitt, utilizing machine learning and statistical methods for data analysis
- Preprocessed and visualized complex unstructured biomarker data from AI-driven microfluidic chip-based sensors using SQL, statistical analytics tools such as Stata and R, Pandas, and Seaborn

University of Manchester   Manchester, UK
Final Year Undergraduate Research Project   09/2017 – 06/2018
- Implemented a Spiking Neural Network simulator using Python, QtPy5, Brian2, neurodynex and conducted simulations to analyze different dynamical behaviors in single neurons or neuronal networks and examine the synchronicity of the system

- Supervised by Dr. Eva Navarro Lopez with the thesis 'Models of Neurons and Neuronal Networks,' which was selected in one of the Best Computer Science Project Papers in 2018

Korea University, Wireless Intelligence at Network Edge Lab   Seoul, South Korea
Undergraduate Research Intern   06/2015 – 08/2015
- Supervised by Professor Hwangnam Kim and participated in Drone Project as a Summer Undergraduate Research Intern.
- Implemented new functionalities to optimize the real-time simulation of networked drone fleet using MATLAB.

PUBLICATIONS

Rosenblatt, L., Herman, B., Holovenko, A., Lee, W., Loftus, J., McKinnie, E., ... & Stoyanovich, J. (2024). Epistemic Parity: Reproducibility as an Evaluation Metric for Differential Privacy. ACM SIGMOD Record, 53(1), 65-74. **2024 SIGMOD Highlight Awards**

Rosenblatt, L., Herman, B., Holovenko, A., Lee, W., Loftus, J., McKinnie, E., ... & Stoyanovich, J. (2023). Epistemic Parity: Reproducibility as an Evaluation Metric for Differential Privacy. Proceedings of the VLDB Endowment, 16(11), 3178-3191. **Best Experiment, Analysis, & Benchmark Paper Runner-ups**

Rahman, S., & Lee, W. (2023). Out of distribution performance of state of art vision model. arXiv preprint arXiv:2301.10750.

HONORS & AWARDS

SIGMOD Highlight Awards	2024
VLDB Best Experiment, Analysis, & Benchmark Paper Runner-ups	2023
Wasserman Career Grant	2021
KMA Landslide Prediction Big Data Contest	2021

GRANTS & FELLOWSHIPS

NYU Wasserman Career Grant	2021
University of Manchester International Mathematics Merit Scholarship	2015-2017

PROFESSIONAL EXPERIENCE

LG CNS America   Englewood Cliffs, NJ
Network System Engineer   04/2024 - Present
- In 1-3 sentences/phrases, describe the course and your role in teaching it (formulated, assisted, devised syllabus, lectured, administered grades)
- Developed new organic chemistry course structure and presented material to 120 students across 4 sections, achieving a 4.7/5.0 average rating on teacher-course evaluations

Pricewaterhouse Coopers   New York, NY
Data Scientist Intern   06/2022 - 08/2022

- Implemented a BERT-based relation extraction model that classifies semantic relationship between entities, fine-tuned on the TACRED dataset using PyTorch
- Defined data annotation, ML pipelines, testing strategy, and deployed models to AWS cloud platforms

Mozzign   New York, NY
Network System Engineer   06/2021 - 08/2021

- Analyzed US health insurance data and implemented Regression and Random Forest models to estimate a customer's premium based on health, medical, and workout data using Pandas, Seaborn, Matplotlib, scikit -learn, and NumPy
- Led a team of 6 interns as a Product Manager and implemented project management by conducting regular project meetings, facilitating communication, and supervising the project team

Republic of Korea Air Force   Seongnam, South Korea
Staff Sergeant   12/2018 - 10/2020

- Mandatory military service in Republic of Korea Air Force at Seoul Air Base
- Administered the military intranet and server, delivered military security works, and provided technical support

REFERENCES

3 references with the following information:

Julia Stoyanovich
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