WEIHAN LUO

https://weihan1.github.io

SKILLS

Languages:
Python, SQL, R, LaTeX, Java, C/C++

Technologies:
Pytorch, Git, Docker, Pytorch-Lightning, Neovim

EXPERIENCE

DGP Lab, University of Toronto August 2023 - Present
Computer Vision Researcher, Host: David Lindell *Technologies: Pytorch-Lightning, NerfAcc, Instant-NGP*

- Adapted state-of-the-art Implicit Surface Reconstruction techniques for Multiview Transient NeRFs.
- Introduced multiple regularization techniques to stabilize training and constrain the learned geometry.
- Surpassed the SOTA method across the simulated NeRF datasets and real-life captured datasets.

Royal Bank of Canada May 2023 - September 2023
Data Scientist *Technologies: Python, LightGBM*

- Developed a benchmark for future data analysis on a newly acquired Ontario housing valuation dataset.
- Conducted experiments on training on LightGBM with Optuna tuning to predict Canadian housing prices.
- Surpassed the baseline model by achieving a 2% increase in precision and 1% decrease in MAPE.

Royal Bank of Canada May 2022 - April 2023
Data Analyst *Technologies used: SAS, Pandas, Teradata*

- Extracted and analyzed large-scale credit card data using SQL queries in SAS.

PUBLICATION

Weihan Luo, Anagh Malik, David B. Lindell, "Transientangelo: Few-Viewpoint Surface Reconstruction Using Single-Photon Lidar", WACV 2025.

Samir Khaki and **Weihan Luo**, "CFDP: Common Frequency Domain Pruning", CVPR workshop 2023.

PROJECTS

Forecasting Chess Elo On A Time Series December 2021
Data Science Project — https://towardsdatascience.com/forecasting-chess-elo-on-a-time-series-7e448a2d161e

- Devised a custom model to predict chess ratings based on past games.

EDUCATION

University of Toronto 2019 - June 2024
Honours Bachelor of Science with PEY Co-op

EXTRACURRICULAR AWARDS

2015 Chess National Runner-up.