# MATTHEW Y. R. YANG

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## EDUCATION

**Carnegie Mellon University**, Machine Learning Department — 08/2024 – present
Master's in Machine Learning
- Relevant courses: Large Language Models, Machine Learning

**University of Waterloo** — 09/2019 – 04/2024
Bachelor of Computer Science, Statistics Minor
- GPA: 4.0/4.0. Dean's Honours.
- Relevant graduate courses: Foundation Models, Machine Learning, Machine Learning Theory, Artificial Intelligence

## PUBLICATIONS

Disguised Copyright Infringement of Latent Diffusion Models · paper · code — ICML 2024
Yiwei Lu*, **Matthew Y. R. Yang***, Zuoqiu Liu*, Gautam Kamath, Yaoliang Yu. *Equal contributions.

Indiscriminate Data Poisoning Attacks on Pre-trained Feature Extractors · paper · code — SaTML 2024
Yiwei Lu, **Matthew Y. R. Yang**, Gautam Kamath, Yaoliang Yu

"Low-Resource" Text Classification: A Parameter-Free Classification Method · paper · code — ACL 2023
Zhiying Jiang, **Matthew Yang**, Mikhail Tsirlin, Raphael Tang, Yiqin Dai, Jimmy Lin

Integration of Text and Geospatial Search for Hydrographic Datasets · paper · code — JCDL 2022
**Matthew Y. R. Yang**, Siwen Yang, Jimmy Lin

Improved Accuracy vs. Privacy Trade-off in Perturbed Nearest Neighbour Searches · code — Under Review
**Matthew Y. R. Yang**, Thomas Humphries, Florian Kerschbaum

## WORK EXPERIENCE

**Machine Learning Engineer** — 09/2022 – 03/2023
Needl (Y Combinator Startup) — Seattle, WA
- Designed and implemented strategies to collect and process user signals to benchmark the core search product
- Researched various LLM-based document retrieval algorithms to decide on the company's new search architecture
- Hired as the company's first employee

**Software Engineer Intern** — 05/2022 – 08/2022
Rippling — San Francisco, CA
- Designed and implemented a major feature into Rippling's core product that allows companies to track and manage IT requests in Python, significantly improving the user experience of IT admins
- Gave team-wide tutorials on code architecture to onboard full-time engineers

**Software Engineer Intern** — 09/2021 – 12/2021
Wish — San Francisco, CA
- Developed an internal tool that lets Wish's business team resolve withheld merchant payments on their own

**Machine Learning Engineer Intern** — 01/2021 – 04/2021
Oanda — Toronto, ON
- Built an ML pipeline including data cleaning, feature selection, and model hyperparameter tuning that led to an increase in precision by over 30% compared to the previous model in Tensorflow and XGboost

**Software Engineer Intern** — 05/2020 – 09/2020
BorgIQ — Toronto, ON
- Added a file storage feature to the core product; built a BorgIQ Slackbot; created the company's landing page

## SKILLS

**Languages:** Python, C++/C, Java, JavaScript, HTML/CSS, SQL, Bash, Scheme
**Technologies:** PyTorch, Tensorflow, Hugging Face, AWS, Docker, React, Git, LaTeX

## AWARDS

CRA Outstanding Undergraduate Research Award Finalist, 2024 — Top 24 in North America
Canadian Math Olympiad, 2018 and 2019 — Top 50 in Canada