Haoran Wang

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github.com/wang2226

Education

Ph.D. | *Computer Science* — Aug 2022 – now
Illinois Institute of Technology — Chicago, Illinois

Master of Science | *Computer and Information Science* | *GPA: 3.87/4.0* — June 2021
University of Oregon — Eugene, Oregon

Bachelor of Science | *Computer Science* | *GPA: 3.30/4.0* — May 2019
Purdue University — West Lafayette, Indiana

Research Experience

Master Thesis — January 2021 – June 2021
University of Oregon — Eugene, OR

- Thesis Title: Evaluating a Joint Neural Model with Global Features for Document-Level End-to-End Information Extraction.
- Thesis Advisor: Thien Huu Nguyen

Undergraduate Research Assistant — August 2018 – May 2019
Purdue University — West Lafayette, IN

- Built a database to store images along with their metadata captured by network cameras around the globe.
- Evaluated different solutions to Big Data storage problem of unstructured data.

Teaching

Computer Science III, University of Oregon — Fall 2020
Graduate Teaching Assistant

- Taught weekly lab sections.
- Held regular, weekly office hours and answered questions on Piazza.

Computer Science II — Spring 2020, Winter 2021, Spring 2021
Graduate Teaching Assistant

- Taught weekly lab sections.
- Graded student projects for class size of approximately 120 students.

Projects

Parallel Game Tree Search: Gomoku — June 2021
High Performance Computing — University of Oregon

- Developed parallel implementation of Minimax algorithm to perform game tree search on Gomoku (Five-in-a-row) game using OpenMP and CUDA.
- Achieved up to 100x speedup by leveraging GPU compared to serial CPU implementation

Kaggle Competition: Jigsaw Multilingual Toxic Comment Classification — June 2020
Natural Language Processing — University of Oregon

- Fine-tuned BERT, XLM-RoBERTa to classify toxic comments in multiple languages.
- Achieved ROC-AUC score of 0.9459 on undisclosed test data. In comparison, the best entry in this competition achieved 0.9556. Earned top 15 percent finish out of 1,600 entrants.

Kaggle InClass Competition: Multi-Label Sentiment Analysis — May 2018
Machine Learning — Purdue University

- Developed a classifier to do sentiment analysis. Component algorithms and techniques used include: cross-validation, bagging, boosting, Naive Bayes, Logistic Regression, and SVM.
- Achieved 6th place out of 57 competing teams.

Honors and Awards

Provost Doctoral Fellowship 2022-2023
Stevens Institute of Technology Hoboken, NJ

Benjamin Fellowship 2021-2022
Montana State University Bozeman, MT

Semester Honor Student Spring 2019
Purdue University West Lafayette, IN

Skills

Coursework Highlights Linear Algebra, Probability, Algorithm Analysis, Machine Learning, Introduction to Artificial Intelligence, Natural Language Processing, Data Science, Parallel Processing (CUDA programming).
Programming: Python, Java, C, C++, Javascript, C#, SQL, R, Julia
Document Creation: Microsoft Office Suite, LaTeX, Markdown