Thean Cheat Lim

Boston, MA 02130 ▪ 612-707-5056 ▪ theanc.lim@gmail.com ▪ GitHub: TheanLim

EDUCATION

Master's in Computer Science **anticipated May 2024**
Northeastern University Boston, MA
CGPA 4.0

TECHNICAL SKILLS

Languages: Python, Java, JavaScript, HTML, CSS, SQL
Databases: MSSQL, MySQL
Web Technologies/ Libraries: React, Redux, NodeJS, Tensorflow, Keras, PyTorch, scikit-learn
Professional Certificate: Deep Learning.AI Tensorflow Developer
Coursera Specialization: Practical Data Science (built, trained, tuned hyperparameters, deployed ML models with A/B testing in the AWS cloud), Deep Learning Specialization

EXPERIENCES

Graduate Research Assistant **Aug 2021 – Present**
Northeastern University Boston, MA

- Researching on algorithms to speed up the computation of Influence Functions used for deep learning model interpretation and debugging.
- Improved the kNN's recall of influential data points by ~80%($k = 5 \times 10^4$). Enhanced model corrections capability and consequently boosted model performances.
- Fine-tuned BERT on HANS and MNLI using PyTorch and HuggingFace.
- Replicating the FASTIF (Guo et al, 2020) experimental results.

Catastrophe Risk Analyst **Oct 2018 – Jun 2021**
Validus Research Minneapolis, MN

- Authored R packages to aggregate data based on a Shapefile and estimate losses on AWS Redshift.
- Developed scripts (R, SQL, VBA) for automation, efficient data wrangling, loss simulations, and pricing.
- Prepared insurance data, modeled catastrophe risks, priced reinsurance contracts, performed sensitivity analyses on losses distributions, and simulated potential losses from live catastrophic events.

Section Leader - Code in Place **Apr 2021 – May 2021**
Stanford University Stanford, CA

- Led weekly discussion section to supplement professors' lectures of Stanford's CS106A Python Programming course.

PROJECTS

Super SloMo Implementation

- Technologies: Python, PyTorch
- Implemented the U-Nets used in Super SloMo and provided an open-sourced model training script.

Inventory System

- Technologies: Java, H2(SQL)
- A full-stack BookStore inventory system for adding/searching/updating/deleting/checking out a product.
- Effortless database vendor switching: Overcame vendor-specific SQL differences by implementing an Object-Relational Mapping library.

Social Media Web Application

- Technologies: ReactJS, Redux, Firebase
- Developed a full-stack web application for socializing and sharing thoughts with an online community.
- Features included: Login, Sign Up and Content Feed Pages.

Tic Tac Toe AI Agent

- Technologies: Python
- Implemented Monte Carlo Tree Search (MCTS) algorithm as AI Tic Tac Toe agent