PREET MISTRY

Software Developer

linkedin.com/in/preet-mistry github.com/pmistry9597

EXPERIENCE

Deep Learning Researcher
MSRG - University of Toronto

May 2023 – Feb 2024

Academic research group with computational methods focus

- Designed and developed a novel Graph Neural Network (GNN) architecture for molecular bond strength prediction (Python)
- Trained resulting model to 0.50 MAE performance, comparable to previous attempts in literature
- Developed and optimized model, training, and validation code to execute efficiently on distributed clusters

Full Stack Developer
Ultimate Kronos Group

September 2021 – August 2022

Software development company for human capital solutions

- Devised and built a web application for managing company clients and services provided to them (Typescript/Angular)
- Collaborated with 3 colleagues to satisfy new security requirements for above app through creation of a containerized backend (Java)
- Managed and upgraded various scripts for automating tasks pertaining to company clients and provided services (Python, Bash)

Software Developer and Engagement Associate
STEM Powering

July 2020 – September 2020

Charity with the core motive of democratizing STEM for all students

- Designed and created an educational space exploration and orbit simulation game (Javascript, HTML, CSS)
- Developed an orbit solver from scratch that solves Kepler's equations for the above game
- Designed and created an educational circuit game in collaboration with 1 other colleague (Javascript)
- Created the circuit simulator for the above game which uses linear equations and circuit theory

PROJECTS

Climate Hack 2022 - Computer Vision Competition

March 2022

Satellite weather imagery prediction for next 2 hours given previous 1 hour of data

- Designed and developed a solution that placed 14 out of over 130 participants (Python)
- Attempted an assortment of architecture types developed for computer vision
- Utilized novel optimizers (settled on LAMB) and various techniques to train the final model

SKILLS

Python | Java | C++ | Javascript | HTML | CSS | SQL | Docker | GitHub | Linux | Windows

EDUCATION

Bachelor of Applied Science (B.A.Sc) Computer Engineering
University of Toronto

September 2018 – May 2024

GPA 3.21

ACHIEVEMENTS

Dean's List - First Year
University of Toronto

September 2018 – April 2019

Completed first year with a GPA above 3.7

Member of the Month
University of Toronto Aerospace Team

January 2019

For diligent and persistent effort towards developing and debugging the rocket avionics software

Fermat Contest - Top 25% Placement Worldwide
University of Waterloo

February 2017

Mathematics competition organized by the University of Waterloo for high school students

EXTRACURRICULARS

UTRA - Autonomous Rover Team

September 2022 – Present

Robot operating system + CV Developer

Iron Dragons - Dragon Boating Team

September 2023 – Present

Paddler trying out for competitive team

INTERESTS

Piano | Dragon Boating | Astronomy | Running | Metal Crafting | Robotics