MENGYANG LIU

• https://github.com/Mengyang-Liu6666

EDUCATION

Queen's University, Kingston, Ontario, Canada

Sep. 2020 - Apr. 2024

Program: Bachelor of Computer Science (Hons.)

Specialization: Computing and Mathematics

CGPA: 4.27 / 4.3

Courses:

Computing: Data Structures (A+), Algorithms (A+), Artificial Intelligence (A+),

Neural and Cognitive Computing (A+), Reinforcement Learning (A+),

Evolutionary Computing (A+), Ethics in Computing (A+),

Undergraduate Thesis (A+)

Statistics: Statistical Learning (A+), Bayesian Analysis (A+), Stochastic Processes (A+),

Statistical Inferences (grad level) (A+), Asymptotic Statistics (grad level) (A+)

Mathematics: Graph Theory (A+), Information Theory (A+), Stochastic Control (ongoing)

RESEARCH EXPERIENCE

Robotic Arm Pick-and-Place with Deep RL (Undergraduate Thesis)

Sep. 2023 - Present

- Supervised by Prof. Sidney Givigi, to complete robotic arm pick-and-place and deployed on a real robotic arm.
- Designed and constructed my own training environment (available in my Github repo).
- Ran experiments on different reward functions and RL algorithms.
- Self-studied Deep Reinforcement Learning (DRL) concepts online from CS 285 at UC Berkeley.

Treatment Effect Estimation Under Covariate Adaptive Designs

May. 2023 - Aug. 2023

- Supervised by Prof. Yanglei Song, funded by Department Undergraduate Summer Research Award (USRA).
- Investigated the efficacy of study in seamless phase II/III clinical trials for cancer research
- Conduct literature review, self-study and discuss with the supervisor weekly.
- Solved a mathematical problem that is raised by a practitioner.

WORK EXPERIENCE

Teaching Assistant

Jan. 2023 - Apr. 2023

- Course: CISC 352 Artificial Intelligence, Winter 2023
- Set up assignments for students to complete and auto-graders for convenient grading.
- Interacted with students regularly to answer queries via email, forum and office hours.

AWARD

Wm. Roy Hardick Scholarship

Aug. 2023

- Awarded on the basis of academic excellence, to an undergraduate student entering 4th year with a concentration in Mathematics and Statistics.
- The scholarship is exclusively awarded to one student each year in the Faculty of Art and Science.

Dean's Honour List with Distinction

Oct. 2022 and Sep. 2023

- Excellent academic achievement during the 2021-22 and 2022-23 academic year, for achieving an academic year GPA that places them in the top 3% of all students registered in B.Sc. and B.Comp.