HAOJUN QIU

J 778-522-8798 ☑ harry.qiu@mail.utoronto.ca 🛅 linkedin.com/in/haojun-qiu 🞧 github.com/haojunqiu

Hightlight of Qualification

- Pursuing a Bachelors Degree in Computer Science and Data Science.
- Attained a solid foundation in calculus, linear algebra, and discrete math from courses taken.
- Developed field-specific technical skills and research abilities during research experience.
- Possessed strong communication, problem-solving, collaboration, and leadership abilities, developed from research experiences.
- Technical skills: Python, PyTorch, NumPy, SciPy, Java, C, C++, R, LATEX

Education

University of Toronto

Sep. 2020 - Present

Bachelor of Science in Computer Science and Data Science, CGPA: 4.0/4.0 (94.1/100)

Toronto, ON

Experience

University of Toronto, Dynamic Graphics Project Lab

May 2022 - Present

Research Assistant

Toronto, ON

- Working with Prof. Kyros Kutulakos and Prof. David Lindell on a computer vision project, regarding a new patch-based image representation via generative modeling.
- Implemented some image to image translation applications based on our newly developed image representation scheme, such as single image super-resolution, image denoising, etc.
- Familiarized modern deep learning frameworks such as PyTorch, developed the writing, presentation, and communication skills along the way.

Projects

Textual Inversion Improved by Captioning Initialization | Python

May 2023

- Improved the convergence speed of the textual inversion through out-of-shelf captioning model "Caption Anything" based on SAM.
- Wrote a short paper together with other two students, organized all the convergence results and comparisons with the vanilla textual inversion method.

Matrix Completion Competition | Python, NumPy, PyTorch

Dec. 2022

- Worked on a matrix completion problem by building innovative ideas on top of the given basic code base, resulting in a top-3 accuracy performance among 25 teams.
- Led a team of 3 in brainstorming five neural network architectural ideas and implemented them collaboratively, and analytically showcased the improvement in accuracy for all five of them.
- Communicated our work by writing a detailed report, receiving a 100% score on the project marking scheme.

Todo-list App | Java

Apr. 2021 - Aug. 2021

- Led a team of 4 focusing on backend development, brainstormed ideas during meetings and kept consistent communication through social media, maintaining a highly engaged collaboration.
- Implemented around 50% of backend classes, including the entire login system, and internal messaging system, making our app more professional and interactive.
- Designed the structures of the app following clean architectures, and included over 6 different design patterns in the project, resulting in the program being easy to maintain and extend.