Haoda Li

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Education

M.Eng. in Electrical Engineering and Computer Science August 2022 – May 2023
University of California, Berkeley Berkeley, CA.

B.Sc. in Computer Science & Data Science September 2017 – June 2022
University of Toronto, St. George Campus (GPA 3.91/4.00) Toronto, ON, Canada

Experiences

Research Intern August 2021 – August 2022
Vector Institute Toronto, ON, Canada

- Researched on and built the simulation platform for robots to resemble objects with 3D sensors using C++.
- Developed CUDA kernels for differentiable rendering acceleration and researched on novel methods for deep neural rendering using PyTorch.

Software Engineer May 2020 – August 2021
Huawei Canada Markham, ON, Canada

- Prototyped cloud-based video editing applications using PyTorch, FastAPI, and React. The application enabled users to perform AI-assisted assets selection, auto-focus, auto-cropping.
- Automated backend pipeline for data processing, model training, and cloud deployment for over 1TB/week customer video data using Docker and PostgreSQL.
- Used OpenCV and C++ to create test systems for hand tracking and action recognition.

Full Stack Software Developer April 2019 – April 2020
Easy Group Inc. Toronto, ON, Canada

- Manage the web services and online shops, the system served for over 240,000 customers.
- Designed and implemented the client information management system using MySQL, Django, and React
- Led the development of data pipeline for customer behavior analysis and product recommendations using Pandas and Scikit-learn, and the deployment on AWS.

Projects

iVis for Single Cell RNA-seq September 2019 – April 2020
University Health Network Toronto, ON, Canada

- Designed and created the interactive application for processing and visualizing high-dimensional single cell RNA-seq data.

Mverse January 2020 – June 2021
University of Toronto, Dept. of Statistics Toronto, ON, Canada

- Worked as a core contributor to mverse, an R open-source package for multiverse analysis. The package extends R package multiverse with more friendly interfaces for analysts.

Skills

Programming Languages: Python, C++/C, C#, Java, JS, R, MATLAB
Full Stack Development: ReactJS, Typescript, JS/HTML/CSS, AWS, MongoDB, MySQL
Computer Vision and Graphics: PyTorch, CUDA, OpenGL, WebGL, Unity, Blender
Softwares and Services: Docker, Oracle APEX, Git, Unit/Linux OS