Haoda Li

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EDUCATION

UC Berkeley
MEng in Electrical Engineering and Computer Science
Aug 2022 - May 2023
Berkeley, CA

University of Toronto
BS in Computer Science and Data Science
Sept 2017 - Jun 2022
Toronto, ON, Canada
cGPA: 3.91 / 4.0

SKILLS

Programming Languages
Python • C++/C • JavaScript • Java • Go • R • MATLAB
Computer Vision and Graphics
PyTorch • CUDA • OpenCV • NumPy • OpenGL/WebGL •Unity • Blender
Web Full Stack
React • TypeScript • NodeJS • MySQL• MongoDB
Softwares
AWS • Linux • Bash • Docker • Git • LaTeX

TEACHING

Teaching Assistant, U of Toronto
Computer Graphics | Winter 2022
Intro. Machine Learning | Fall 2021
Physics-based Animations | Fall 2021

AWARDS

UC Berkeley MEng Fung Excellence Scholarship
Jun. 2022 | Berkeley, CA
Dr. James A. & Connie P. Dickson Scholarship In Science & Mathematics
Oct. 2020 | Toronto, ON, Canada
University College Special Admission Scholarships
Sept. 2017 | Toronto, ON, Canada

EXPERIENCE

Huawei Canada | Software Engineer, Intern
May 2020 - Aug 2021 | Markham, ON, Canada
- Worked on computer vision and multimedia team. Worked on Developing and integrating video understanding methods for cloud based video editing applications.
- Worked on the deployment of video retrieval algorithms for mobile devices.
- Assisting research on hand tracking and human action recognition.

Vector Institute | Research Intern
Aug 2021 - May 2022 | Toronto, ON, Canada
- Supervised by Prof. Animesh Garg under PAIR Lab. Researched on novel methods for robots to resemble objects with 3D sensors.
- Worked on simulation environments and 3D object data generations.

SysNet, University of Toronto | Research Intern
Jan 2022 – Aug 22 | Toronto, ON, Canada
- Supervised by Prof. Nandita Vijaykumar. Researched on a novel method for efficient and editable 3D scene reconstruction and view synthesis.
- Worked on CUDA accelerations and operators for GPU based point aggregations and differentiable physics based volume rendering.

Easy Group Inc. | Full Stack Software Developer
Apr 2019 – May 2020 | Toronto, ON, Canada
- Managed the web services, CRM systems, and online shops serving for over 240,000 customers.
- Led the development of automatic data pipeline for customer behavior analysis and product recommendations.

PROJECTS

Mverse | Software Developer
Jan 2021 – Jun 21 | Toronto, ON, Canada
Worked as a core contributor to *mverse, an R package for multiverse analysis*. The package extends R package multiverse with more friendly interfaces for analysts.

iVis for Single Cell RNA-seq | Software Developer
Sept 2019 – Apr 20 | Toronto, ON, Canada
Designed and developed the interactive application for processing and visualizing high-dimensional single cell RNA-seq data. Implemented GPU acceleration for single cell analysis algorithms and visualizations.

PUBLICATIONS

[1] CHEN, Y., LI, H., TURPIN, D., JACOBSON, A., AND GARG, A. Neural shape mating: Self-supervised object assembly with adversarial shape priors. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition* (2022), pp. 12724–12733.

[2] RAO, V. R., KHALIL, M. I., LI, H., DAI, P., AND LU, J. Decompose the sounds and pixels, recompose the events. *Proceedings of the AAAI Conference on Artificial Intelligence 36*, 2 (Jun. 2022), 2144–2152.

[3] RAO, V. R., KHALIL, M. I., LI, H., DAI, P., AND LU, J. Dual perspective network for audio visual event localization. In *European Conference on Computer Vision (ECCV)* (October 2022).