Xixiao Pan

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EDUCATION

University of Michigan, Ann Arbor, MI CGPA: 3.84/4.00 [Sep. 2023 - May. 2025]
Bachelor of Science in Engineering, Data Science, College of Engineering

Shanghai Jiao Tong University, Shanghai, China CGPA: 3.62/4.00 [Sep. 2021 - July 2025]
Bachelor of Science in Engineering, Electronic and Computer Engineering, UM-SJTU Joint Institute

SKILLS

Programming: C++, C#, Python, Unity, UE5, R, Matlab, HTML, CSS, React, SQL, Github Usage, Agile
Language: English, Chinese

EXPERIENCE

Software Development Engineer Intern - AMD [May. 2024 - Present]
CoreSW, AMD, Shanghai, China
- Deployed deep learning models including diffusions and LLMs on Windows platform. Exported ONNX models and optimized the models on Olive by optimizing transformer and quantization.

Research Intern [Jan. 2024 - Present]
Paul Green, UMTRI, Multidisciplinary Design Program, University of Michigan
- Built an easy-to-use driving simulator platform with immersive environments through the creative use of **RoadRunner**, **Carla Unreal Engine 4** and simple hardware. Implement the I94 highway.

Research Student [June 2022 - Apr. 2023]
Qinya Li, Shanghai Jiao Tong University, China
- Implemented the deep residual network (**ResNet-50**) and Very Deep Convolutional Networks (**VGG**) by **Pytorch**. Assisted in reproducing the self-supervised learning **SimCLR** model and **MoCo** model for unsupervised multimedia data quality assessment technology.

PROJECTS

Scalable Web Search Engine: Similar to Google [Mar. 2024 - Apr. 2024]
- Developed a robust search website, allowing users to input queries and receive top relevant results.
- Employed **information retrieval** techniques including text analysis (tf-idf) and link analysis (PageRank) to calculate scores for each document. Implemented parallel data processing with **MapReduce**.

Virtual Reality Application in Education: DinoSnap [Mar. 2024 - Apr. 2024]
- Used **Unreal Engine 5** to teach players facts about dinosaurs through interacting features including finding food, riding on the dinosaur, and taking photos with the virtual camera.
- Utilized affordance systems, raycasting, pawn possessions and collision systems.

Full-stack Web Development: Simulate Instagram [Jan. 2024 - Mar. 2024]
- Created a platform with features including login and logout, posts, comments, likes, and followers.
- Utilized **SQL** for database management and the **REST API** to facilitate communication with the server.
- Leveraged **Flask** and **React** to develop both client-side and server-side dynamic pages.

Machine Learning Application: Predicting Depression Condition [Oct. 2023 - Dec. 2023]
- Collected, pre-processed data from CDC to predict depression by biochemical and social conditions.
- Implemented **Bootstrap, SVM, Logistic Regression, Random Forest, KNN** to train and test the model.

LEADERSHIP

Shanghai Orientation Leaders of Pre-Departure Orientation Events - *University of Michigan* [June 2024]
Make a presentation in front of a hundred people about college life.

Teaching Assistant - *Shanghai Jiao Tong University* [Feb. 2023 - July 2023]
Facilitated students in crafting writing skills in Creative Writing and Academic Writing courses.

President of Nanyang Dance Association - *Shanghai Jiao Tong University* [Sep. 2022 - Aug. 2023]
Managed Dance Troupe Training, organized showcases, and led the association to a five-star level.

AWARDS

Third Prize, XR Mini-Hackathon [Mar. 2024]
Utilized hand tracking on Quest in Unity to generate random boxing combinations in Virtual Reality.

Shanghai Jiao Tong University Undergraduate Excellent Scholarship [2021 - 2022]