HEFU SHAN

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EDUCATION

Sophia University, Tokyo, Japan

Apr. 2025 - Present

Master of Science in Artificial Intelligence (Computer Vision), Expected Mar. 2027

Teikyo University, Tochigi, Utsunomiya, Japan

Apr. 2021 - Mar. 2025

Bachelor of Science in Information and Electronics Engineering

☑ INTERNSHIP/PROJECTS/RESEARCH

Panoramic Autoencoder Decoder

Jun. 2025 – Present

Python, PyTorch, CUDA, Conda Research

- Addressed geometric distortion for panoramic images based on the fundamental MAE (Masked AutoEncoder).
- Redesigned spherical positional embeddings using latitude and longitude converted to 3D Cartesian coordinates, incorporating Fourier features and spherical harmonics.
- Utilized adaptive masking, random masking, and multi-stage sampling for cosine annealing training.

Blog and Portfolio

May. 2025 – Present

Jekyll, HTML5, CSS3, JS, TS, React Personal Project

https://shengruduzhou.github.io/https://shanhefu-portfolio.vercel.app/

- Built a static front-end blog using Jekyll, creating an interactive blog with traditional front-end technologies (HTML5, CSS3, JS).
- Developed a highly interactive and futuristic portfolio using React scaffolding and dynamic animation effects with TS/GSAP/Anime.js, leveraging hardware acceleration for many effects. (Note: Maybe required using VPN required to access, and GPU recommended for optimal viewing of effects.)

Online Course Feedback System

Apr. 2024 – May. 2025

React, JS, CSS, HTML, Flask, ARIMA, MySQL Bachelor's Thesis

https://github.com/shengruduzhou/Feedback_System

• Developed a full-stack web system using Python, Flask, and JavaScript to analyze and provide feedback on student concentration.

T-net Classroom Question System

2023

Java, HTML5, CSS3, JS, Spring Boot, MySQL Group Project

• Built a web-based question system for university students using Spring Boot and MySQL (for true/false questions and score calculation).

SKILLS

- Programming Languages: Python, Java, JavaScript/TypeScript, SQL
- Machine Learning:
 - Frameworks: PyTorch
 - Libraries: NumPy, Pandas, OpenCV, Scikit-learn
 - Models: Transformer, Vision Transformer (ViT), Masked Autoencoder (MAE), CNN

• Web Development:

- Front-End: React, HTML5, CSS3, GSAP, Anime.js

- Back-End: Flask, Spring Boot

• Tools & Databases: Git, GitHub Actions, Docker, Conda, Maven, MySQL, LaTeX

♥ Honors and Awards

Rotary Yoneyama Memorial Scholarship Nominee (Final Interview Stage), Scholarship

Japan Student Services Organization (JASSO) Scholarship Recipient, Scholarship

2023

i MISCELLANEOUS

• Technical Blog: https://shengruduzhou.github.io/

• GitHub: https://github.com/shengruduzhou

• Languages: English - Intermediate (TOEIC 610), Japanese - Fluent, Chinese - Native