

HUI ZHANG

<https://github.com/hui0041600> | www.hu1zhang.com

PROFILE

Full-stack developer with expertise in React, Next.js, and AI-driven applications. Strong foundation in JavaScript, Python, and database management. Skilled in real-time data processing, cloud deployment, and AI/ML integration. Quick learner, problem-solver, and effective team player in fast-paced environments.

EDUCATION

Pace University, New York, NY | MS in Computer Science Candidate | GPA: 3.97 | Sep 2023 – May 2025
Henan University, Kaifeng, Henan | BA in French | GPA: 3.05 | Sep 2018 – Jun 2022

ACADEMIC PROJECTS

Parallel Computing with GPU and CUDA

- Optimized CUDA-based parallel computations, achieving 10× speedup over CPU implementations.
- Conducted comparative analysis of Mandelbrot Set computations and image processing using CUDA on NVIDIA T4 GPUs vs. OpenMP on CPUs.
- Led theoretical research, developing lecture materials to simplify GPU programming concepts for students.

Myportfolio

- Built a modern portfolio website with Next.js, TypeScript, and Tailwind CSS, showcasing projects and skills.
- Implemented dynamic UI components, SSR, and SSG for enhanced performance and SEO.
- Integrated a Node.js backend (Express.js) to support future API requests and dynamic updates.

Deep Learning-Based Image Classifier

- Developed a ResNet50-based image classifier, achieving 90.09% accuracy using TensorFlow & PyTorch.
 - Built an image preprocessing pipeline with OpenCV for data augmentation & normalization.
 - Optimized GPU-accelerated training with Adam optimizer, batch normalization, and hyperparameter tuning.
 - Benchmarked TensorFlow vs. PyTorch, demonstrating PyTorch's +2.5% accuracy improvement and superior performance.
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WORK EXPERIENCE

Nanjing Yuduoyou Information Technology Co Ltd | Jiangsu, China | May 2022 – Aug 2024

- Increased content production efficiency by 40% through advanced multimedia editing.
 - Created 50+ interactive courseware materials, improving learner engagement by 30%.
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SKILLS

- Programming: Python, JavaScript, TypeScript, Java
- Frameworks: Next.js, React, Node.js, Express.js
- AI/ML: TensorFlow, PyTorch, OpenCV
- Web Technologies: Tailwind CSS, SEO Optimization
- DevOps: Git, Vercel, CI/CD