Xuming (Mac) Huang

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EDUCATION

University of Wisconsin–Madison **Madison, WI**
B.S. Honor in Computer Sciences (Programming Abstractions, Operating Systems) *Jan 2025 – Present*
GPA: 4.0/4.0

Stanford University **Stanford, CA**
Visiting Scholar (CS 107 Computer Organization & Systems, CS 161 Algorithms) *Jun 2025 – Aug 2025*
GPA: 4.0/4.0

University of Shanghai for Science and Technology **Shanghai, China**
B.S. in Computer Science (Machine Learning, Artificial Intelligence) *Sep 2023 – Dec 2024*
Major GPA: 4.5/4.5

PROFESSIONAL SKILLS

Languages: English (Fluent), Mandarin (Native)
Programming: Python, C/C++, Assembly, Java, JavaScript
Tools: Git, Linux, FastAPI, Docker
Research: LLMs, Computer Systems/Architectures

INTERNSHIP EXPERIENCE

Microsoft **Remote**
LLM Research Intern *Nov 2024 – Jan 2025*
- Authored SOTA survey on NER & multimodal sentiment (models, datasets, applications)
- Analyzed CAN-NER, Lattice LSTM, W2NER, BERT-CRF, FLAT; documented architectures & trade-offs
- Reproduced training/inference with runnable pipelines and implementation notes

Apple **Remote**
NLP Algorithm Intern *Oct 2024 – Dec 2024*
- Assisted in improving App Store personalization through NLP-driven search
- Developed multilingual translation for FaceTime with Transformer

Cool AI Technology **Shanghai**
Technical R&D, Product Dev & Ops *Jul 2024 – Sep 2024*
- Implemented web interface using Next.js and Tailwind CSS
- Developed backend services with FastAPI for LLM integration
- Contributed to deployment of AI-Hub project with Prompted Agents

RESEARCH EXPERIENCE

LinuxGuard: AI-Powered Kernel Security Analysis **Madison, WI**
Research Assistant (Supervised by Prof. Remzi Arpaci-Dusseau and Vinay Banakar) *Jan 2025 – Present*
- Built AI pipeline processing Linux commits to generate static analyzers
- Developed RAG-enhanced LLM system achieving 72% precision in kernel vulnerability detection
- Applied ML clustering (K-means, TF-IDF) to derive high-confidence vulnerability anti-patterns

Multispectral U-Net Segmentation Research **Shanghai**
Research Assistant (Supervised by Prof. Xing Hu) *Oct 2024 – May 2025*
- Contributed to development of EKU-Net for plant disease segmentation
- Supported experimental setup and analysis on pest/disease region segmentation

HONORS & AWARDS

- Dean's List, UW-Madison
- Presidential Scholarship, USST
- Merit Scholarships, USST