Xuming Huang

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Apple
Attn: University Recruiting — Software Engineering Internships
One Apple Park Way
Cupertino, CA 95014

Dear University Recruiting Team,

I am a junior in Computer Science at the University of Wisconsin–Madison, applying for Apple's Software Engineering Internships (Role No. 200606145-3810). I'm motivated by Apple's bar for craft and privacy, and I want to contribute to products where rigorous engineering meets great user experience.

My background spans back-end, systems, and ML-adjacent engineering:

- Systems for ML: Built a heterogeneous CPU–GPU task scheduler in C/CUDA with cuBLAS optimizations and memory pooling, dispatching work based on compute and transfer characteristics.

- ML for systems: Developing LinuxGuard, an AI-assisted kernel security analysis pipeline with a RAG-enhanced detector (~72% precision on vulnerability patterns) and clustering (K-means, TF-IDF) to surface anti-patterns.

- Teaching/Visualization tools: Created a CPU cache hierarchy simulator, a heap allocator visualizer, a compiler pipeline demo, and graph/sorting algorithm visualizers—focusing on clarity, measurement, and reproducibility.

Previously, I interned at CoolAI, where I built customer-facing demos for a China Business Network (CBN) interview and represented the company at the World Artificial Intelligence Conference (WAIC). That experience strengthened my ability to communicate across functions, prioritize under time pressure, and deliver polished artifacts.

Academically, I completed Stanford's CS107 (Computer Organization & Systems, A+) and CS161 (Design & Analysis of Algorithms, A). I'm comfortable with Python, C/C++, and JavaScript; with data structures/algorithms, API design, and debugging/profiling; and with Git-based workflows and testing. I enjoy translating open-ended requirements into measurable milestones and iterating quickly with evidence.

I am excited to contribute across areas mentioned in the posting—Backend (Siri/iCloud/Maps), Core OS, iOS & Web tools, SRE/IS&T, and Information Security. I'm eager to deepen Swift and platform APIs, and I care about building robust, well-tested software with attention to latency, memory, and accessibility. I will be returning to school after the internship and meet the student eligibility requirement.

Thank you for your time and consideration. I would welcome the opportunity to discuss how my systems background, ML-adjacent projects, and passion for user-centric engineering could contribute to Apple's software teams.

Sincerely,

Xuming Huang