

Narrative for ACSAC 2025 Conferenceship Application

My name is Ye Wang, and I am a final-year Ph.D. candidate at the University of Kansas specializing in system security. My research examines advanced sensor spoofing attacks and defensive strategies at the intersection of the digital and physical worlds, where adversaries exploit sensors to deceive or disrupt devices. For example, I investigated imperceptible infrared laser attacks that mislead facial recognition systems through physical adversarial perturbations, a line of work that has appeared at leading venues.

I was drawn to this field because of its societal importance. Sensors mediate authentication, health monitoring, and autonomous driving, yet their openness creates serious risks. Traditional research often overlooks the user perspective: many attacks either appear suspicious to users or succeed only rarely when evading detection, while defenses often require system modifications or reduce usability. My work seeks to understand how attacks can remain both effective and imperceptible to users, and how defenses can protect without altering system architecture or undermining user experience.

This year, my poster *“A Novel Fully Sensor-driven Attack Chain”* was submitted to ACSAC. As the first student author, presenting in person will be invaluable. I hope to use ACSAC to (1) obtain rigorous feedback on evaluation methodology and threat-model boundaries; (2) learn from cutting-edge work to refine my roadmap from poster to full paper; and (3) engage with researchers whose expertise spans mobile, AI, and systems security. I plan to attend sessions aligned with my interests, connect with authors working on physical-world attacks and defenses, and exchange ideas on comparative benchmarks and responsible disclosure practices.

Beyond research benefits, ACSAC will be pivotal for my long-term career. I aspire to pursue a faculty position where I can advance impactful research and mentor the next generation of security scholars. Networking at ACSAC will allow me to build relationships with established researchers, explore collaborations, and gain mentorship—connections that extend far beyond what is possible through virtual exchanges.

As a doctoral student at a public university, my travel support is limited, and I am ineligible for further internal funding this year. With a modest stipend already strained by rising costs, covering registration, travel, and lodging independently would be extremely difficult. Conferenceship support would therefore be decisive in enabling me to attend ACSAC and fully benefit from this opportunity.

I sincerely appreciate your consideration. Attending ACSAC 2025 would accelerate my research and strengthen my academic future, enabling me to contribute more meaningfully to the information security community.