ACSAC Student Conferenceship Application

Applicant: Yongming Fan, Purdue University

I am a PhD student in the Department of Computer Science at Purdue University, where my research focuses on applied cryptography and software security. My journey into security research began during my master's studies at Indiana University, which inspired me to pursue this path further. Over time, I became particularly fascinated with apply cryptographic techniques, especially zero-knowledge proofs, and exploring their practical applications. In addition to my research, I am also an instructor for a cybersecurity course at Ball State University, where I can share my knowledge and passion for security with others.

My primary areas of interest include applied cryptography, software security, and zero-knowledge proofs. I focus on applying zero-knowledge proofs in real-world applications, as they offer promising solutions for enhancing privacy and security. Additionally, I am interested in finding methods to detect vulnerabilities in software that relies on cryptographic protocols, ensuring their robustness.

Security isn't the only area I've explored, but it's the one that keeps drawing me back. There's a unique sense of accomplishment in uncovering hidden vulnerabilities, like solving a complex puzzle. I enjoy the challenge of finding weak points and figuring out how to strengthen systems to make them more resilient. Each discovery and solution contribute to making technology safer, which fuels my passion for the field.

Upon completing my degree, I plan to pursue a career as a cryptographic engineer or security researcher. My goal is to design and implement secure, privacy-preserving systems that have a tangible impact on society. I aim to engage in research that not only advances cryptography but also applies theoretical insights to solve real-world security problems.

Attending ACSAC would be a tremendous opportunity to engage with leading experts in the field of information security and cryptography. I expect to gain valuable insights from the latest research. With my paper accepted by ACSAC, I am excited to present my work and share my research findings with the community. This platform will provide me with invaluable feedback from peers and mentors, shaping my future research.

Given my academic background and research focus in security and, I believe that my participation in ACSAC with the Conferenceship will be a valuable opportunity for advancing myself and the community. It will allow me to engage with the latest developments in the field and present my findings to a broader audience. Additionally, I will share the insights I acquire with students in my cybersecurity class, helping to foster a stronger community in information security.