

Call for Ph.D. Applications

Fully Funded Ph.D. Positions for Cyber-Physical Systems Security | Fall 2027

Prof. Hyungsub Kim's lab in the Department of Computer Science at Indiana University (IU) invites applications for multiple fully funded Ph.D. positions beginning in Fall 2027. Our group works on cybersecurity for cyber-physical systems (CPS) such as autonomous vehicles, drones, and satellites. We develop algorithms and data structures to model attacks, discover vulnerabilities, and build more secure software, hardware, and machine-learning systems. For recent projects and publications, please visit: <https://kimhyungsub.github.io/>

Research Areas

- Physical sensor attack modeling and simulation
- Vulnerability analysis of open-source software and hardware systems
- Automated vulnerability detection and patch generation
- Program analysis and formal methods for cybersecurity
- Security and robustness analysis of machine-learning models and ML-enabled systems

Who We Are Looking For

- A bachelor's or master's degree in Computer Science, Electrical or Electronic Engineering, Aerospace Engineering, Mechanical Engineering, or a closely related field
- Strong interest in CPS security, embedded systems, robotics, and autonomy
- Strong programming experience, particularly in C/C++
- Solid foundations in operating systems, computer architecture, compiler, and algorithms
- Eligibility for graduate admission to Indiana University. See the Luddy School graduate admissions requirements: <https://luddy.indiana.edu/admissions/graduate.html>

What We Offer

- Full funding through RA or TA appointments, including tuition, stipend, and health insurance
- Close mentorship in an active cybersecurity research group
- Collaboration with leading cybersecurity researchers
- Support for building a strong research profile through publications, collaborations, and internships

How to Apply

Interested applicants should email hk145@iu.edu with the subject line **Ph.D. Application for Fall 2027** and attach the following materials:

1. Research statement describing how your research interests, background, and experience align with and could contribute to the lab's research directions
2. Curriculum vitae
3. Undergraduate and/or graduate transcript(s)
4. TOEFL or IELTS score report, if applicable