

Service Statement

Penghui Li

I am enthusiastic about service and view it as essential to advance our field and strengthen academic communities. As a junior researcher, I have benefited tremendously from the research community throughout my career. The constructive reviews I received helped me refine my research and strengthen my contributions. The seminars and workshops I attended exposed me to diverse perspectives and helped me communicate my work more effectively. I look forward to giving back and providing the same thoughtful guidance to others.

Professional Service. I believe rigorous peer review is fundamental to maintaining research quality and advancing our field. I actively contribute and volunteer to review papers for conferences and journals, serve on program committees for top-tier security conferences and workshops, including ACM CCS (2025 and 2026) and USENIX Security (2026). These roles involve careful evaluation of technical contributions, assessment of experimental rigor, and constructive feedback to help authors strengthen their work. My contributions to program committees were recognized with a Top Reviewer Award from ACM CCS in 2025. I also review for leading journals including IEEE TSE, ACM TOSEM, and IEEE TDSC, where the extended format allows for deeper engagement with complex research contributions.

Beyond traditional peer review, I am particularly committed to promoting reproducible research through artifact evaluation. As an Artifact Evaluation Committee member for USENIX Security (2024) and ACM CCS (2023), I review research artifacts to ensure they are well-documented, functional, and reusable. This work involves testing tools, verification of experimental claims, and detailed feedback on usability and documentation. My contributions were recognized with a Distinguished Artifact Reviewer Award from USENIX Security in 2024. This work directly informs my mentorship, as I guide students to build high-quality tools that others can verify and extend. Through both paper and artifact review, I help ensure that our community maintains high standards while it remains accessible to researchers at all career stages.

Community Building and Outreach. I believe that strong research communities are built through spaces for dialogue, collaboration, and knowledge exchange. At Columbia, I organized the Agentic AI Security and Privacy Seminar Series in Fall 2025. I identified and invited speakers, coordinated schedules, and helped secure \$1,000 in funding from Columbia's Data Science Institute for refreshments that encourage networking. This initiative has established a hub for research at the intersection of AI and security and fostered interdisciplinary collaboration across groups. The consistent attendance from faculty and students, along with the informal discussions that have sparked new research collaborations and helped students identify thesis topics.

I also contribute to knowledge dissemination through guest lectures at Columbia and Hong Kong Polytechnic University, where I cover topics from basic to advanced security techniques. These teaching opportunities have helped me refine my ability to communicate complex technical ideas to diverse audiences and strengthen institutional connections. Through these activities, I work to create inclusive environments where researchers can exchange ideas, form collaborations, and advance our collective understanding of security challenges.

Future Service Goals. My service activities are deeply interconnected with my research and teaching. I plan to expand my service contributions in three key areas. First, I aim to take on leadership roles and organize workshops that bridge security, programming languages, and machine learning communities. This would enable me to shape research agendas and foster cross-disciplinary dialogue at a broader scale. Second, I will actively contribute to curriculum development at my future institution. As artificial intelligence reshapes computer science and automates routine tasks, I will design courses that emphasize depth and critical thinking to better prepare students for careers where deep expertise cannot be replicated by AI. My courses on software security will integrate emerging topics such as LLM-based analysis and agentic systems while developing the sophisticated reasoning skills that remain uniquely human. Third, I intend to strengthen connections between academia and industry through contributions to open-source security initiatives. This will help ensure that research advances translate into practical defenses deployed in real systems. Additionally, I am eager to contribute to departmental service through faculty search committees,

graduate admissions, and student mentorship programs that strengthen our academic community.