

Message from the Chairs

AgenticSE 2025

Welcome to AgenticSE 2025, the inaugural Workshop on Autonomous Agents in Software Engineering, co-located with ASE 2025 in Seoul. This new workshop is dedicated to exploring how AI-powered agents, driven by large language models and advanced planning frameworks, are reshaping software engineering.

Recent years have seen a surge of interest in autonomous AI systems that can plan, code, test, and even deploy software with minimal human intervention. From research prototypes such as Auto-GPT and OpenHands to industry initiatives like Devin and Manus AI, these technologies are inspiring bold visions of what “Software Engineering 2.0” might look like. Yet, despite this rapid progress, our community has lacked a dedicated venue to consolidate knowledge, share experiences, and define a research agenda for this new era. AgenticSE is our collective step toward filling that gap.

This first edition of the workshop brings together researchers and practitioners from software engineering, programming languages, AI, HCI, and systems. Our program features keynotes by leading experts from key players, including Google and ByteDance, as well as technical paper presentations covering topics ranging from building and debugging agents to designing multi-agent systems across the software development life cycle. We also expect lively debates on evaluation, safety, human-agent collaboration, and how to responsibly integrate these technologies into real-world practice.

AgenticSE would not be possible without the enthusiastic support of our community. This year, we received 13 submissions, of which 8 were finally accepted. We sincerely thank the authors for their submissions, the program committee for their thorough reviews, and our keynote speakers for sharing their insights. We are also grateful to the ASE 2025 organizers for providing a welcoming home for this workshop and to all participants for joining us in shaping this emerging field.

We hope you will find AgenticSE 2025 an inspiring and interactive venue, sparking new collaborations and ideas that will continue well beyond the workshop itself.

AgenticSE 2025 Workshop Chairs

Maliheh Izadi, *Delft University of Technology, Netherlands*

Michael Pradel, *CISPA, Germany*

Satish Chandra, *Meta, United States*