Singapore Manifesto on AI-Driven Innovations for Code

January 19, 2026

2026

Introduction

Generative AI is rapidly changing the landscape of software engineering. However, a key challenge remains - how can we incorporate AI as a reliable part of next-generation development? At the Singapore Manifesto, invitees from all over the world, working in academia, industry, and government, come together in Singapore to discuss the opportunities and risks of this technological change. Join us to map the future of trustworthy software development with AI.

Meet the Organizers

Abhik Roychoudhury
Provost's Chair Professor, NUS
Senior Advisor, Sonar

Abhik Roychoudhury is Provost's Chair Professor of Computer Science at the National University of Singapore (NUS), where he leads a research team on Trustworthy and Secure Software (TSS). He is Senior Advisor at Sonar, subsequent to the acquisition of his spinoff AutoCodeRover on AI agents for coding. He received his PhD in Computer Science from the Stony Brook University in 2000, and has been a faculty member at NUS School of Computing since 2001. Abhik's group at NUS has focused on symbolic program analysis, along with applications of program analysis to areas such as computer security, agentic AI or cyber-physical systems. These works have been honored with various awards including an International Conference on Software Engineering (ICSE) Most Influential Paper Award (Test-of-time award) for (symbolic analysis based) program repair, IEEE New Directions Award 2022 (jointly with Cristian Cadar) for contributions to symbolic execution.

Abhik was the inaugural recipient of the NUS Outstanding Graduate Mentor Award 2024. Doctoral students graduated from his research team have taken up faculty positions in many top academic institutions. He has served the software engineering research community in various capacities including as chair of the major conferences of the field, ICSE (in 2024) and FSE (in 2022). Currently, he serves as chair of the FSE steering committee. He is a member of the editorial board of Communications of the ACM. He is the current Editor-in-Chief of the ACM Transactions on Software Engineering and Methodology (TOSEM). Abhik is a Fellow of the ACM, recognized for contributions to automated program repair and fuzz testing.

Baishakhi Ray
Associate Professor, Columbia University

Baishakhi Ray is an Associate Processor in the Department of Computer Science at Columbia University in New York, USA. Her research lies at the intersection of Artificial Intelligence and Software Engineering, with a particular focus on developing intelligent, trustworthy tools for improving software reliability, security, and developer productivity.

Dr. Ray's work has been recognized with several honors, including the IEEE TCSE Rising Star Award, NSF CAREER Award, IBM, and VMWare Faculty Awards. Her publications have received multiple Distinguished Paper Awards at top venues, the ICSME Test of Time Award, and have been featured in CACM Research Highlights, reflecting the broad impact of her research on both the academic and industrial communities. She also serves as an Amazon Scholar, collaborating with the Amazon Q Agentic AI team to build intelligent developer agents grounded in real-world software engineering practice.

All information about the event, an updated list of attendees, and the agenda can be found on our website, which can be accessed using the QR code below or the following URL
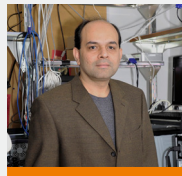https://spartan-nus.github.io/ai4code-roundtable

Confirmed Attendees

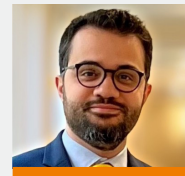**Ahmed Hassan**
Professor
Queen's University Canada

Anup Kumar
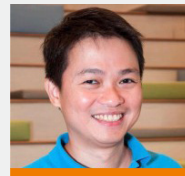Distinguished Engineer & Head Client Engineering
IBM Asia Pacific

Atif Memon
Distinguished Engineer
Apple

Behrooz Omidvar-Tehrani
Principal Scientist
AWS

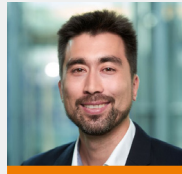**Cho Chia Yuan**
Dy Director
Ministry of Defence (Singapore)

Corina Pasareanu
Principal Scientist, Technical Professional Leader
Carnegie Mellon University & NASA Ames Research Center

Cristian Cadar
Professor
Imperial College London

Daniel Dahlmeier
Chief Data Scientist
SAP Artificial Intelligence

David Lo
OUB Chair Professor
Singapore Management University

Gang Lee
CEO, Co-Founder
ELGO AI

Haifeng Ruan
PhD Student, Co-Founder AutoCodeRover
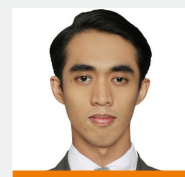*National University of Singapore*

Harry Wang
Chief Growth Officer
Sonar

Hsiao Ming Chia
Director (Core Engineering Products)
GovTech Singapore

Imam Nur Bani Yusuf
Postdoctoral Researcher
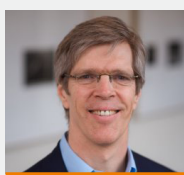*National University of Singapore*

Jeffrey Salleh
Director, Cloud Engineering
Oracle

Karlina Tjoa
Lead Software Engineer
MoHT Singapore

Martin Rinard
Professor
Massachusetts Institute of Technology

Neha Rungta
Applied Science Director
AWS

Raveendra Kumar Medicherla
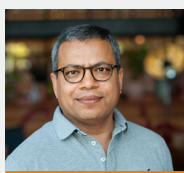Principal Scientist
Tata Consultancy Services

Ridwan Shariffdeen
Principal Research Scientist
Sonar
CEO & Co-founder
AutoCodeRover

Robert Morris
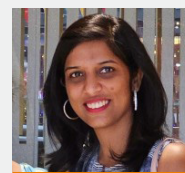Chief Technology Strategist
MoHT Singapore

Satish Chandra
Principal Engineer
ML for Developer Productivity, Google

Shaowei Ying
Chief Scientist
NCS

Shweta Garg
Senior Applied Scientist
AWS AI Labs

Sian Wee Tan
Senior Vice President (Innovation and Enterprise)
National University of Singapore

Sungmin Kang
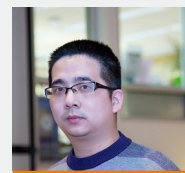Postdoctoral Researcher
National University of Singapore

Varun Srivastava
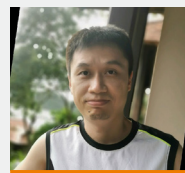Engineering Leader - Search and AI
Atlassian

Volkan Sevindik
Chief Technology Officer (CTO)
Starhub

Xin Xia
Qiushi Distinguished Professor
Zhejiang University

Yanyan Hu
Deputy Director - Architecture and Development
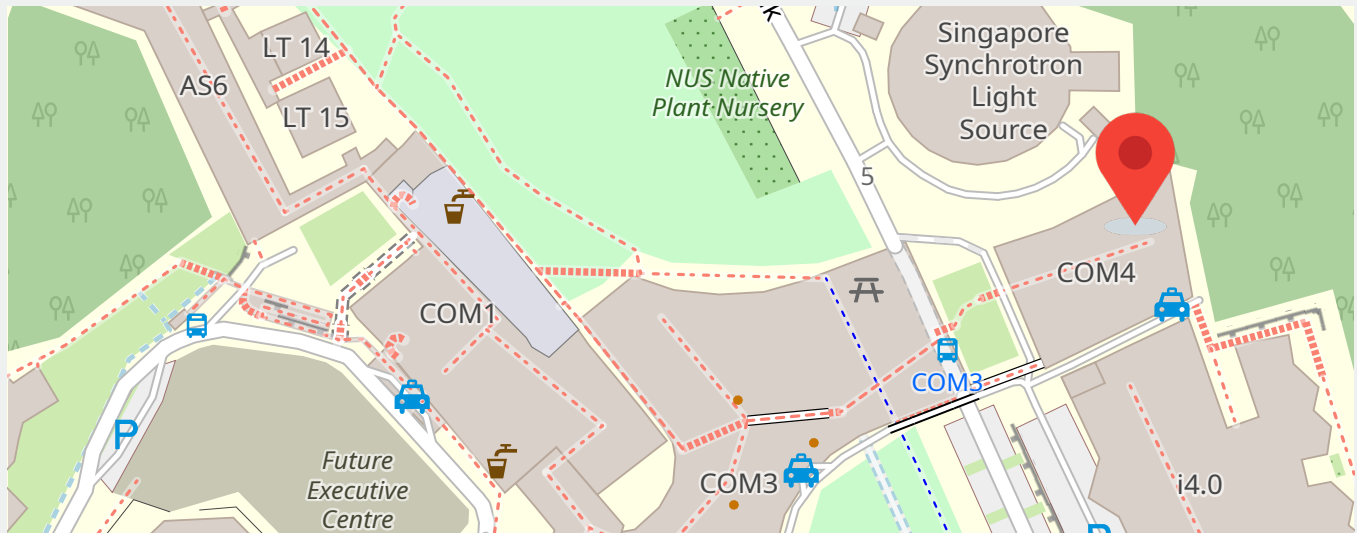*MoHT Singapore*

Yuntong Zhang
PhD Student, Co-Founder AutoCodeRover
National University of Singapore

Venue

The event will be held on **January 19, 2026**, at the **Information Systems and Analytics Teaching Lab 2 (COM4-02-01)**
https://maps.app.goo.gl/rQHKURhwnh9NNiix5

Tentative Agenda

Time	Title
9:00 AM	Registration
9:30 AM	Introduction of roundtable topics by organizers
10:00 AM	Talk on Trust by Neha Rungta
10:30 AM	Talk on AI for Software Engineering by Satish Chandra
11:00 AM	Talks on AI for Code by Harry Wang, Hsiao Ming Chia, Yanyan Hu
12:00 PM	*Lunch Break*
1:30 PM	Roundtable discussions 1. What will be the role of academia in AI for code? 2. How to engender trust in coding agents? 3. What is the future of software engineering with agents regarding design, coding, and validation? 4. What are the challenges in industry in deployment of AI for code?
3:00 PM	*Tea Break*
3:30 PM	Summary of roundtable discussions by participants
4:30 PM	Wrap-up and discussion on follow-up by organisers for the next meeting in New York (May 2026)

For further inquiries or assistance, kindly contact **Dr. Sungmin KANG** at the following email address: sungmin@nus.edu.sg