



Real-Time Intelligent Programming Assistance



Dr. Yan Chen

CS Department
Virginia Tech

🗣️ 孔雨晴 助理教授

🕒 2022年12月1日 星期四 10:00am

📍 在线讲座



Abstract

To learn new skills, overcome gaps in their existing knowledge, and improve the quality of their work, software developers of all expertise levels routinely rely on support from other developers, documentation, online forums, and AI-based tools as they work. However, these support resources are often inefficient: other developers may not be available on-demand to respond to questions quickly, online forums do not always provide support for codebase-specific questions, and AI technologies cannot fully understand users' intent or reliably generalize to novel use cases. In this talk, I will lay out a vision for intelligent, immediate, and personalized programming assistance, and discuss three projects that showcase methods for enabling this kind of support by coordinating collective intelligence of developers and machines at scale.

Biography

Yan Chen is an incoming Assistant Professor in the CS Department at Virginia Tech, USA, starting in January 2023. He's currently a Postdoctoral Fellow in the Computer Science Department at the University of Toronto, Canada. Yan received his Ph.D. degree from the University of Michigan, USA. His research spans human-computer interaction, programming support tools, software engineering, crowdsourcing, and CS education. Yan is active in the HCI research community. His work has been published at top HCI conferences, including ACM CHI, UIST, and CSCW. He received the Best Short Paper award at VL/HCC 2020 and the Best Paper Honorable Mention Award at UIST 2022.