Building on over a decade of AI-enabled collaborative learning experiences in the classroom and online, in this talk we report our work in classroom studies in large online software courses with substantial teamwork components. Project courses provide an effective test bed to begin building an empirical foundation that we hope will eventually contribute to an end-to-end learning path beginning in the classroom and continuing with on-the-job learning in the workplace. In our classroom work, we have adapted an industry standard team practice referred to as Mob Programming into a paradigm called Online Mob Programming (OMP) for the purpose of encouraging teams to reflect on concepts and share work in the midst of their project experience. At the core of this work are process mining technologies that enable real time monitoring and just-in-time support for learning during productive work.

Carolyn Penstein Rosé, PhD

Dr. Carolyn Rosé is a Professor in the School of Computer Science at Carnegie Mellon University. Her research program focuses on computational modeling of discourse to enable scientific understanding the social and pragmatic nature of conversational interaction, and using this understanding to build intelligent computational systems for improving collaborative interactions. She is a Past President and Inaugural Fellow of the International Society of the Learning Sciences, Founding Chair of the International Alliance to Advance Learning in the Digital Era, and Co-Editor-in-Chief of the International Journal of Computer-Supported Collaborative Learning.

Computer-Supported Collaborative Learning through Software Development

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