



报告 ID: 232

类型: Keynote in EN

Software Engineering in Practice and Research at ABB

2025 年 2 月 28 日星期五 09:15 (1h 10m)

Building and maintaining industrial systems comes with a unique set of challenges. They have to live over extended periods of time, meet stringent reliability and safety standards, have to deal with budgets in low-margin industries, and need to adapt to modern expectations on ease-of-use and fast innovation.

In this keynote, we will elaborate on how ABB deals with these competing forces. First, we introduce ABB and the systems we are delivering to our customers, including the typical lifecycle phases they go through. Second, we reflect on the last 2 decades of industrial research that has been conducted to support the product development units. Third, we show the fundamental shifts these systems are going through right now and highlight challenges we face as practitioners. Finally, we conclude with an example of an application that leverages ML/AI to elevate the operator prowess and a look under the hood of the development of this application.

About the speakers

Dr. Benedikt Schmidt is a key driver of ABB's process automation activities towards autonomous operations, working as product owner for the Augmented Operator portfolio and Senior Principal Engineer. He joined ABB in 2015, focusing on research and development of ABB's data analytics practices and bringing them to our products. Before joining ABB, Benedikt worked at SAP's research center. He holds a PhD from Technical University of Darmstadt.

Dr. Roland Weiss globally leads ABB's process automation R&D activities, covering a portfolio of control and IO hardware, embedded and safety systems, DCS automation software as well as IIoT middleware and applications. He joined ABB in 2005 and has held various R&D management positions, focusing on research on and development of ABB's automation systems in markets including power generation as well as robot and industrial automation. As part of a dedicated task force, he contributed to kick-starting ABB's Digital unit. Before joining ABB, Roland Weiss headed a research team in the area of Formal Methods at University of Tübingen. He holds a PhD in Computer Science from University of Tübingen.

I want to participate in the youngRSE prize

报告人: 博士 WEISS, Roland (ABB); 博士 SCHMIDT, Benedikt (ABB)

分会分类: SE Industry Day Keynote

议题分类: Software Engineering (SE 2025)