The Cost-Benefit Analysis of Usage Data in RobotStudio
(Keynote)

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Abstract—Instrumenting development environments and automatically uploading anonymized data has a concrete cost. With the cautionary tale of the Eclipse IDE’s failed data collection effort looming over us, we must examine for ourselves the question: Is the cost worth it?

In this talk I’ll do a deep dive into ABB’s own data collection effort for a robotics-focused development environment, RobotStudio, weighing the costs and benefits from this particular case. We’ll discuss how usage data saved the team person years’ of effort, how team leaders increased the visibility of this data by co-locating it with the cafeteria’s lunch menu, and we’ll open up discussion as to what we should explore next.

Index Terms—Interaction; usage; logs

Biography

David C. Shepherd is a Senior Principal Scientist & Research Area Coordinator with ABB Corporate Research where he conducts research on topics from developer productivity to end-user programming for robots. He is passionate about increasing the impact of software engineering research, which has manifested itself in his professional activities. His day job serves as a ongoing personal experiment on how to, and how not to, transfer technology.

His open source work has created a tool downloaded by 47,000+ developers. His recent chairing of five industrial tracks in software engineering (e.g., ICSE, FSE, ICPC, SANER, ICSME) gave him deep insight into the challenges and successes of others’ transfer efforts. His recent project, the FlowLight, which had exposure on venues like The Wall Street Journal and BBC Radio, opened his eyes to the impact of popular publications. Finally, his position as the Co-Editor-In-Chief of the Journal of Systems and Software gives him a more permanent platform to encourage industrial publications.

His career goal is to be a champion of impact through service and an example of impact through projects.