WASP Project Course 2025

Onboarding AI tools – my new software developer colleague?

Background

AI tools are introduced in several businesses, including software development. This project aims to explore two aspects of AI tools, namely adoption attitudes and integration of tools in the tool chain. Firstly, we aim to explore how software developers act and react to including AI tools in their workbench. Secondly, we want to investigate how these tools are integrated in the tool chain, both front-end user interfaces and back-end engine integration including the training data for such tools.

Ericsson has piloted AI tools for specific purposes (e.g. Borg et al. 2024) and is now in the process of rolling out AI tooling for development, requirement handling and maintenance. Developers have been asked to adopt and start using the tools provided during 2025. We want to study the integration and adoption process of AI tooling, what the user experience is, and what, if any, obstacles or hurdles might be present.

We plan to collect data from user interviews and surveys, and, if possible, compare it to tool logs on usage. We plan to present a comprehensive overview of what tools are used for, how the developers experience the tool usage, how they are integrated into the tool chain, and to provide actionable conclusions on how to further leverage AI enhanced tools to increase developers' productivity.

Constraints:

- Preferably in Lund since some data collection may take place in person.
- Participants shall be able to sign confidentiality agreements with Ericsson.

Participants

Industrial partner: Ericsson

Industrial supervisor: Dr. Sigrid Eldh, sigrid.eldh@ericsson.com

Academic supervisor: Prof. Per Runeson, per.runeson@cs.lth.se, Lund University

Coordinating WARA representative: N/A

Suggested WASP PhD students: Andreas Bexell, Rushali Gupta, Lo Heander, Konstantin Malysh

Challenges to investigate

- What are software developers' attitudes to AI powered development tools? This involves both principal attitudes, and how the tools function in a practical context.
- How are AI tools integrated in developers' tool chains? This involves front-end perspectives on how the user experience and works flow is supported, and back-end issues of training data and technical integration.

Resources

- Access to academic and industrial supervisor
- Access to relevant interviewees

Deliverables

- A report on the project, including a summary of the study, main findings from the observations (as much as can be shared for confidentiality reasons), and recommendations for adoption of AI-supported software engineering tools.

References

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Keywords

AI tools, AI adoption