



# Mining for Performance Problems and Their Solutions

## Description

Mining software code repositories provides valuable input for proactive approaches in software management.

The goal of this topic is to, investigate the possibility of using BugMiner [1], to mine code repositories and issue tracker systems for performance problems and how they are resolved. This would allow to automatically find previously undetected performance problems inside other projects, and propose their solutions.

This seminar paper should *i)* provide an introduction into the topic of mining of code repositories general and *ii)* elaborate in more detail the BugMiner software.

In addition to studying and summarizing the research literature, it is a mandatory part of this seminar to gather and share hands-on experience with the available tooling infrastructure. The provided references [2, 3] are to be considered a starting point and it is expected to extend the literature search and present a coherent view on the current state of the art in this area.

## References

- [1] bugminer. <https://github.com/bugminer/bugminer>. Accessed: 02-02-2016.
- [2] Kim Herzig and Andreas Zeller. *Mining Your Own Evidence*, chapter 27. 2010.
- [3] Chadd C. Williams and Jeffrey K. Hollingsworth. Automatic mining of source code repositories to improve bug finding techniques. *IEEE Trans. Softw. Eng.*, 31(6):466–480, 2005.

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