CROSSMINER

Developer-Centric Knowledge Mining from Large Open-Source Software Repositories

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CROSSMINER enables the monitoring, in-depth analysis and evidence-based **selection of open source components**, and facilitates knowledge extraction from large open-source software repositories.

Technology Innovations

Source Code Mining

Techniques and tools for mining the necessary knowledge to support decision making by software engineers at the software architecture and software design levels.

Text Mining

Text mining to allow developers to analyse a wide range of textual sources including newsgroups, bug trackers, mailing lists, forums, social media and stac
k overflow, to improve performance and quality of code.

Configuration Mining

Sophisticated source code analysis tool for system configuration management code and a DevOps dashboard providing inferred insights derived from metrics from analysing system configurations.
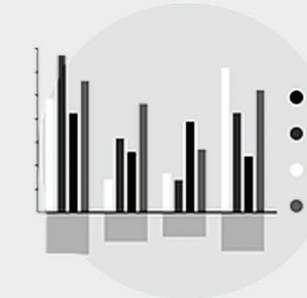
Knowledge Extraction

Support for high performance and robust declarative project analysis workflows to plug together analytical components and define dependencies/interactions at a high level of abstraction.

Cross-Project Relationships

Technology Innovations Tools for specifying, discovering and representing different project relationships, based on extracted metrics and on similarity measures underpinning automated creation of clusters.

Advanced IDEs

Eclipse-based IDE to support development of software systems including a wizard for specifying project components that developers want to reuse in developing new products.

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1. Open Source Mining

2. Knowledge Extraction

3. Quality Monitoring

Helping software developers
select the right open source components.

CROSSMINER supports the development of software systems for a wide range of applications and provides techniques and tools for extracting knowledge from existing open source components, and to use this knowledge to select and reuse the best existing software to develop new systems. Selected open source components are monitored to raise alerts related to quality, and to give suggestions to reduce development effort and increase the quality of new software products.

Project Partners