

A Survey of Software Refactoring

by Tom Mens, Tom Tourwe

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This paper provides an overview of the current research being done in software refactoring and restructuring. The authors discuss the following refactoring activities:

- Identifying where to refactor software
- Determining which refactorings to apply
- Guaranteeing the applied refactoring preserves behavior
- Applying the refactorings
- Evaluating the success of the refactoring

They then talk about various refactoring techniques including graph transformations and invariant verification. They discuss work being done to try and formalize program preservation proofs. The paper also describes refactorings related to non-source code software artifacts. They end with a look at various tools that offer support for automation, reliability, configurability, coverage, and scalability.

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