

Successful software products evolve through a process of continuous change as bugs are fixed, new features added, and quality issues addressed. Refactoring supports the volatile software lifecycle by providing better ways to reduce and manage the growing complexity of software systems while improving developer productivity. Refactoring can be performed at all levels from requirement specification down to source code level, and, in essence, involves improving the internal structure of a software artifact without altering its functionality. In spite of the popularity of refactoring both in practice and as a research topic, many open questions remain, particularly in terms of understanding how refactoring is performed, measuring the impact of refactoring, and improving tool support in all areas of refactoring.

We invite submissions from both academia and industry on any topic that is refactoring related, including:

- ⦿ Source code refactoring
- ⦿ Requirement, design and architectural refactoring
- ⦿ Refactoring opportunities detection and recommendation
- ⦿ Tool support for refactoring
- ⦿ Mining refactoring changes from software repositories
- ⦿ Evaluation and benchmarking of refactoring methods
- ⦿ Code smell detection and correction
- ⦿ Effect of refactoring on system complexity and quality
- ⦿ Empirical studies and experience reports
- ⦿ Software remodularization
- ⦿ Model transformation
- ⦿ Introduction of design patterns through refactoring
- ⦿ Machine learning applied to software refactoring
- ⦿ Role of refactoring in evolution and migration
- ⦿ Refactoring of mobile, web and cloud applications

## IWOR'19 Format

The objective of the 3rd International Workshop on Software Refactoring (IWOR 2019) is to provide an informal interactive forum for researchers and practitioners to exchange ideas and experiences, streamline and foster research on software refactoring, identify some common ground for their work, share lessons and challenges, thereby articulating a vision for the future of software refactoring research. We solicit four types of submissions:

- Full research papers (max **8** pages)
- Position papers (max **4** pages),
- Tool demo papers (max **4** pages),
- Industrial presentation (max **2** pages).

These different categories offer researchers who are at different stages in their research maturity the opportunity to benefit from workshop participation. Page limits include references, figures and appendices.

## IWOR'19 Submissions

All paper submissions will be reviewed by three program committee members. The authors of accepted submissions will be asked to join the workshop. We will encourage all participants to submit a paper of any of the four categories, but the workshop will be open. All interested parties are welcome to register, even without an accepted paper. All submissions must be formatted according to the IEEE Conference Proceedings Formatting Guidelines (title in 24pt font and full text in 10pt font, LaTEX users must use `\documentclass[10pt, conference]{IEEEtran}` without including the `compsoc` or `compsocconf` option) and should be submitted through EasyChair at:

<https://easychair.org/conferences/?conf=iwor2019>

The official publication date of the workshop proceedings is the date the proceedings are made available by IEEE. This date may be up to two weeks prior to the first day of ICSE 2019. The official publication date affects the deadline for any patent filings related to published work.

### February 1, 2019

Workshop paper submissions due

### March 1, 2019

Notification to authors

### March 15, 2019

Camera-ready copies due

### May 28, 2019

Workshop

## General Chair



**Nikolaos Tsantalis**  
Concordia University

## Program Chairs



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Drexel University



**Serge Demeyer**  
University of Antwerp

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**Davood Mazinanian**  
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