

# Call for Papers

## The 1<sup>st</sup> International Symposium on Software Fault Prevention, Verification, and Validation (SFPVV 2024)

Hiroshima, Japan 2 - 3 December 2024

Workshop HP: <https://icfem2024.info/SFPVV2024/index.html>

### Important Dates:

#### Full Paper Submissions:

*30 August 2024*

#### Acceptance / Rejection

#### Notification:

*7 October 2024*

#### Camera-ready Papers:

*8 November 2024*

### Symposium Organizers

#### Program Chair

Shaoying Liu  
Hiroshima University, Japan

#### Program Committee

Available in the homepage.

### Background and Objectives:

Software fault prevention, verification, and validation are essential and important approaches to ensuring software productivity, reliability, and qualities. Fault prevention focuses on the issues of how to prevent the introduction and occurrence of faults in software systems. Verification is a means to rigorously check whether software systems satisfy their specification or properties. Validation refers to the technologies and activities for confirming whether the behavior and performance of software systems satisfy the user requirements. Various techniques and supporting tools have been developed to fulfill the tasks of software fault prevention, verification, and validation, but many difficulties and open problems remain unaddressed.

This symposium aims to invite researchers and practitioners working on software quality assurance to exchange ideas and to discuss how formal approaches, testing-based approaches, AI approaches, and their combinations can be studied, established, and supported to fulfill the goals of fault prevention, verification, and validation. All people who are interested in the topics mentioned above are welcome to submit papers and to participate in the symposium.

### Scope and Topics:

Authors are invited to submit technical papers describing original and unpublished work on, but not limited to, the following topics:

- Specification and Prototyping
- Specification and Testing
- Refinement and Code Generation
- Formal Verification and Review
- Testing-Based Formal Verification
- Bug Prediction and Reliability Modeling
- AI and Specification
- AI and Code Generation
- AI and Testing
- AI and Verification
- Human-Machine Pair Programming
- Human-Machine Pair Inspection
- Supporting Tools
- Case studies
- Application experience

### Submission and Publication

Submissions to the symposium must not have been published or be concurrently considered for publication elsewhere. Papers should be written in English and should not exceed 18 pages in the Springer LNCS format. All papers should be submitted using the EasyChair link: <https://easychair.org/conferences/?conf=sfpvv2024>. The proceedings of the symposium will be published in the Springer LNCS series. The details of the symposium can be found in the symposium homepage.

### Cooperations

Hiroshima University

ICFEM 2024