

# Winter School in Software Engineering 2017

Pune, India, 11<sup>th</sup>-16<sup>th</sup> December, 2017

Call for Participation

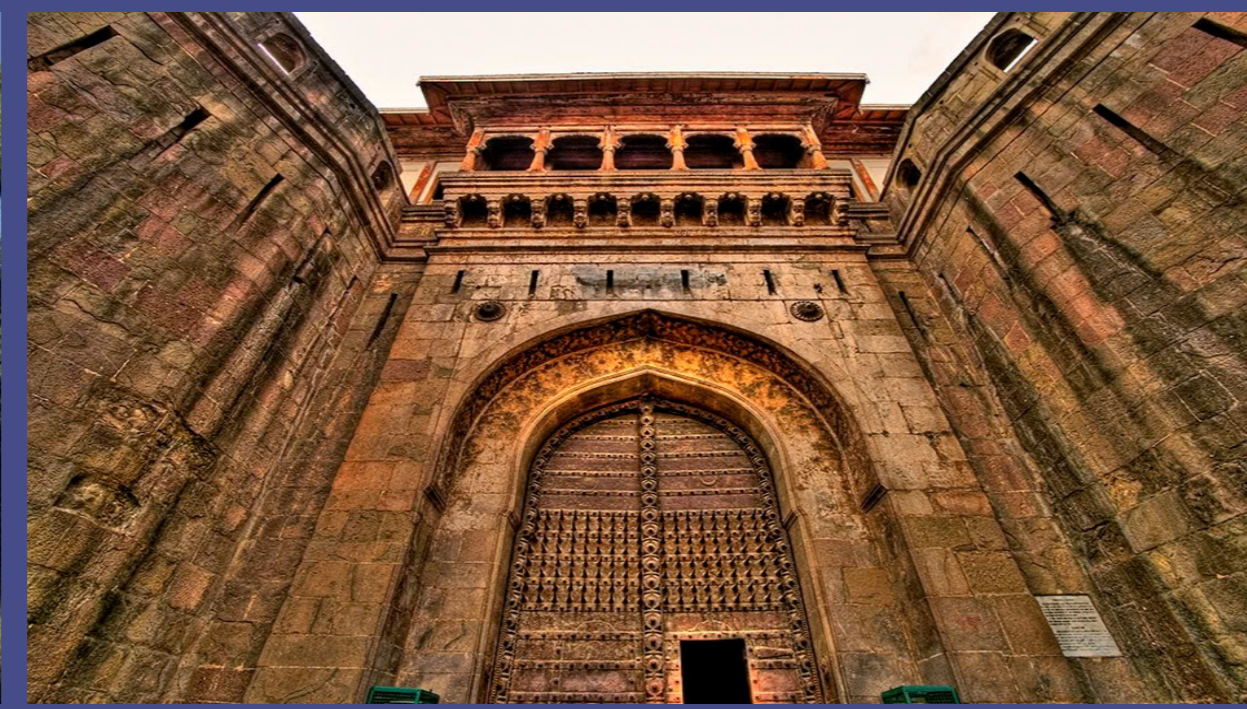
## Objective

**Winter School in Software Engineering (WSSE)** aims to encourage students to delve into **Software Engineering Research** by providing them with a forum to get a first hand experience of the field. Renowned speakers from regional and international research communities will talk on a range of topics in software engineering that uncover state-of-the-art research, on-going explorations and open problems in the field, together with hands-on experience for students. Also, experts from the industry will provide their perspective on software engineering in practice as well as give prototype tool demonstrations. WSSE will present an excellent forum to network with top academics, industry researchers and fellow students, discuss advances in the area and learn from a rich line-up of talks.

The inaugural WSSE will focus on the area of **Program Analysis**. The area is primarily concerned with automated analysis of computer programs and reasoning its properties such as correctness, safety and liveness. It has wide applications in understanding source code, analyzing change impacts, proving program properties, synthesizing correct code, transforming programs, creating specifications from programs, detecting defects and so on.



Pune University



Shaniwar Wada



TRDDC



Sinhgad



Expressway

## Tentative Topics

WSSE 2017 aims to cover the following topics in the field of Program Analysis:

- ▶ Static data-flow and control-flow analysis
- ▶ Dynamic program analysis
- ▶ Formal Methods, Program Verification, Program correctness
- ▶ Program analysis for testing and debugging
- ▶ Program synthesis
- ▶ Some aspects of analyzing concurrent programs
- ▶ Industry experiences and demonstrations

## Eligibility Criteria

Candidates having computer science background, are welcome to apply for participation in WSSE 2017. The school is open to:

- ▶ PhD students (primarily in Programming Languages/Software Engineering)
- ▶ Master's students (desirable to have taken course on compiler construction and/or program analysis at under-grad or master's level)
- ▶ Third-year or Final-year under-grad students (desirable to have taken course on compiler construction)
- ▶ Faculty members (preference for those pursuing PhD in software engineering)
- ▶ Industry practitioners (preferably working in research or R&D in software engineering, with exposure to tools in software analysis/software engineering)

## Application Process

To apply for the school, please refer to the official website of WSSE - <http://isoft.acm.org/winterschool17/>

## Confirmed Speakers

WSSE 2017 will feature talks by the following invited speakers:

**Sumit Gulwani (Microsoft Research)**  
**Frank Tip (Northeastern University, Boston, USA)**  
**Alessandro Orso (Georgia Institute of Technology, Atlanta, USA)**  
**Uday Khedker (IIT Bombay, India)**  
**Supratik Chakraborty (IIT Bombay, India)**  
**R Venkatesh (TCS Research, Pune, India)**

## Organizers

The organizing committee consists of the following people:

**Amey Karkare (IIT, Kanpur)**  
**K. V. Raghavan (IISc, Bangalore)**  
**Rahul Purandare (IIITD, Delhi)**  
**Ravindra Naik (TRDDC, Pune)**  
**Sridhar Chimalakonda (IIT, Tirupati)**  
**Subodh Sharma (IIT, Delhi)**

## Important Dates

**Application deadline:** 15<sup>th</sup> October 2017, 23:59 IST  
**Notification of acceptance:** 22<sup>nd</sup> October 2017  
**Registration deadline:** 31<sup>st</sup> October 2017, 23:59 IST  
**School days:** 11<sup>th</sup> to 16<sup>th</sup> December 2017

## Conference Venue

**TATA CONSULTANCY SERVICES**  
Tata Research Development and Design Centre  
54B Hadapsar Industrial Estate, Pune, India

## Sponsors

- ▶ ACM India
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