Welcome to the 2nd International Workshop on Software Architecture and Metrics (SAM 2015), co-located with the 37th International Conference on Software Engineering in Florence, Italy. This is the second year that we are holding this workshop and the first time co-located with ICSE.

Software engineers of complex software systems face the challenge of how best to assess the achievement of quality attributes and other key drivers, how to reveal issues and risks early, and how to make decisions about architecture and system evolution. There is an increasing need to provide ongoing quantifiable insight into the quality of the system being developed to manage the pace of software delivery and technology churn.

Additionally, it is highly desirable to improve feedback between development and deployment through measurable means for intrinsic quality, value, and cost. While there is body of work focusing on code quality and metrics, their applicability at the design and architecture level and at scale are inconsistent and not proven. We are interested in exploring whether architecture can assist with better contextualizing existing system and code quality and metrics approaches. Furthermore, we ask whether we need additional architecture-level metrics to make progress and whether something as complex and subtle as software architecture can be quantified.

The results of our well-attended first workshop revealed that a number of research challenges exist, calling for the urgent attention of both academia and industry. These include:

- how to codify informal best practices to derive quantitative metrics,
- how to measure architecture complexity and ease of change,
- how to quantitatively assess the goodness of architecture decisions,
- how to incorporate informal artifacts into metrics computation,
- how to define domain-specific software architecture metrics,
- when quantitative metrics are more beneficial than qualitative assessments,
- how to avoid abuse of software architecture metrics

The goal of this workshop is to discuss progress on architecture and metrics, measurement, and analysis; to gather empirical evidence on the use and effectiveness of metrics; and to identify priorities for a research agenda. The workshop addresses both academic researchers and industrial practitioners for an exchange of ideas and collaboration.

To support this goal, submissions were sought describing innovative and significant original research, industrial experience, and future trends. The papers were selected after a peer review by three members of the program committee. We accepted 9 papers out of 15 submissions. 7 research/experience and 2 short position and future trends papers. The accepted papers cover topics such as: proposing and validating new metrics, creating and validating tools and techniques, using architecture and metrics, and principles and practices.

Software architecture and metrics is a broad concern of software engineering that blends research and practice. This can be seen from the program and those involved in the workshop program selection process. To encourage interactive discussion, foster brainstorming and community building the workshop consists of short presentations from the accepted papers. These presentations provide a basis for the participants to investigate further open research questions and challenges in practice. It is for that purpose that the program includes sessions dedicated to open discussion. The workshop features two invited talks from Tim Menzies (North Carolina State University) and from Radu Marinescu (Politehnica University of Timisoara).

We thank all authors for submitting their work to SAM 2015. We would like to express our gratitude to the program committee for their thorough reviews of the submissions, which enabled the rigorous
selection of papers contributing to a strong program. Your attendance here today shapes the future
directions of the research and the conversations on the subject, and we look forward to seeing you all
in the workshop and other activities to come.

SAM 2015 Workshop Organizers