

IEEE International Workshop on Modern Software Practices

Call for Papers

(<https://qrs21.techconf.org/track/workshops/msp>)

Modern software practices are transforming the way software and systems are designed, developed, tested, deployed, and monitored. It is widely recognized that progressively higher levels of automation are needed to ensure complex software systems provide continuity of operations. Examples include site reliability engineering (SRE), Development and IT operations (DevOps), Development, Security, and IT operations (DevSecOps), and continuous integration and continuous delivery/deployment (CI/CD). Many of these possess the potential to substantially improve multiple software process and product metrics. Despite the strong interest in modern software practices, the concepts will benefit greatly from further study and formalization. Recognizing that there is no universal software process encompassing all domains, the Modern Software Practices Workshop seeks to convene researchers from across the spectrum, ranging from theoretical to empirical software research for a stimulating exchange. We invite the participation of experts to share their ideas and experiences to identify common themes as well as to define differences. In doing so, we seek to bring enhanced clarity to this ever-evolving field to accelerate the maturation of principles and best practices that can be effectively disseminated to and implemented by the software engineering community.

We invite manuscripts for the MSP workshop to discuss recent research in areas associated with modern software practices. The length of a camera ready paper will be limited to eight pages in the [QRS conference proceedings format](#), including the title of the paper, the name and affiliation of each author, a 150-word abstract, and up to 6 keywords. Topics of interest are broad, including but not limited to:

- Novel models to characterize one or more process and/or product metrics, including but not limited to performance, reliability, availability, and security
- Novel metrics to guide process measurement and improvement
- Maturity modeling and process evaluation techniques
- Algorithmic advances to support automation, including formal methods and machine learning (e.g. DevSecAIOps)
- DevSecOps for machine learning (e.g. MLOps)
- Empirical case studies that elaborate technical and social challenges such as organizational adoption, configuration, and transformation of the work culture
- Opportunities or experiences enhancing corporate and academic training
- Surveys of the state of the art in some aspect of modern software development

Organizing Committee:

Lance Fiondella (UMass Dartmouth) lfiondella@umassd.edu

Vidhyashree Nagaraju (University of Tulsa) vidhyashree-nagaraju@utulsa.edu

Steering Committee:

(TBD)

Key Dates:

Manuscripts Due: September 20, 2021

Author Notification: October 20, 2021

Camera-ready, Copyright due, and Author Registration: November 1, 2021