

Preface

The 2021 Turkish National Software Engineering Symposium (UYMS) is the fifteenth in the UYMS series. The first UYMS was realized in 2003, was held bi-annually until 2011, and has been continuing annually since then.

The UYMS Steering Committee has established the fundamental aim of UYMS as bringing academicians and industrial practitioners together to share innovations, developments, experiences and results in software engineering. With the ubiquity of software technology, the relevance and appeal of UYMS have increased to encompass all realms, not only of industry, but almost of all our daily lives.

Due to the remaining impacts of the COVID-19 pandemic, we decided to hold UYMS online in November 2021 over Microsoft Teams platform licensed to Ege University.

Out of a total of 50 submissions, each blind-reviewed by at least three referees, 35 were selected for presentation, and the 33 papers published here, were actually presented. The accepted papers were classified under nine knowledge areas: software architecture, software testing, software estimation, software process improvement, configuration management, defect prediction, machine learning applications, intelligent software solutions, and digitalization.

We hosted three invited speakers: İpek Özkaya, the Technical Director of Engineering Intelligent Software Systems Group at Carnegie Mellon University Software Engineering Institute (SEI), Paul M. Clarke, an Associate Professor at Dublin City University and Lero, the Science Foundation Ireland Research Centre for Software, and Claude Y. Laporte, an Adjunct Professor at École de technologie supérieure. Dr. Özkaya addressed the different aspects of engineering AI-enabled systems compared to traditional software systems. Dr. Clarke shared his experiences on the application of AI to the task of software architectural transformation, notably in the context of microservices extraction from monolith-based architectures. Dr. Laporte answered an important question in software engineering education: Could the professors who are not teaching software engineering standards to software engineering students be accused of malpractice?

Conference Co-Chairs

Prof. Dr. Murat Osman Ünalır & Dr. Görkem Giray