

IWSM-MENSURA 2024 Proceedings

Preface

In an era where technology is advancing at an unprecedented pace, particularly in the software domain, the design of software measures and the associated measuring instruments must evolve just as rapidly to meet the ever-growing demands of the industry.

For over three decades, the IWSM-MENSURA conference has been a beacon for leading researchers and industry experts in the field of software measurement : IWSM-MENSURA is quite unique in its rich discussions on the applicability of theoretical measurement research to industry.

This year edition continues this tradition, showcasing cutting-edge research and industry insights: it is hosted jointly by the new research chair in Software Products & Projects Management [Chaire philanthropique de recherche en gestion des produits et projets logiciels - ÉTS Montréal \(etsmtl.ca\)](https://etsmtl.ca) and the Montreal section of the Project Management Institute ([Home | PMI Montréal \(pmimontreal.org\)](https://pmimontreal.org)).

The submissions received through the EasyChair system underwent a thorough review with each submission receiving feedback from three to five expert reviewers. Eleven of them were accepted as full papers, including joint academic & industry positions papers that have been used as inputs to organize over two days a set of pre-conference workshops to review progress to date and identify candidate contributions to the four COSMIC taskforces on:

- Artificial Intelligence and sizing of software requirements (Dr. A. Idri)
- Quantum software requirements sizing (Dr. H. Soubra)
- Technical debt software sizing (Dr. T. Fehlmann and D. Koulla-Moulla)
- Sizing of DevOps software portfolio (Dr. S. Trudel)

Next, a mid-week full-day Masterclass on ‘How to control your software projects like never before’ was organized for an audience of PMI-certified professionals with expertise in project management.

The proceedings themselves include the eleven papers presented in the final 2-day program of IWSM-MENSURA highlighting newly developed, specialized knowledge in the following areas:

- Innovative approaches to software sizing measurements.
- Addressing contemporary challenges and breakthroughs in quantum software measurement.
- Advancements in software measurement for DevOps and System Integration.
- Innovations in Technical Debt measurement and E-Government accessibility.

The two keynote speeches completed this year edition of IWSM-MENSURA and were presented by the co-holders of the Research Chair:

- Prof. Alain April: Training on Software Estimation with an Education Game
- Prof. Pierre Bourque: Aligning a Software Measurement Standard to Evolving Software Practices.

We want to thank all the authors of the submitted papers and the program committee members who provided extensive and constructive feedback to the authors.

We would also like to thank the IWSMMENSURA 2024 organization committee, in particular Tuna Hacaloglu along all the steps of the program preparation, and Alain April and Julie Blais, for helping us deal with the logistics involved in running the event. Furthermore, our thanks go to Hüseyin Ünlü and Görkem Kılınç Soylu for all their work in the preparation of the conference proceedings.

Program co-chairs:

- Sylvie Trudel, UQAM- Université du Québec à Montréal, Canada
- Onur Demirors, Izmir Institute of Technology, Izmir, Turkey
- Donatien Koulla Moulla, University of South Africa, South Africa
- Tuna Hacaloglu, ÉTS, Montréal, Québec, Canada