Foreword


Supported by its strong community, the 13 previous editions of the VaMoS workshop successfully bootstrapped research on modelling and managing the variability of software systems, as witnessed by the many related breakthroughs published in top-tier conferences and journals. Embracing his new status of a working conference, VaMoS more than ever aims to bring together researchers and practitioners to share ideas, results and experience about their quest for mastering variability. As such, in addition to its usual call for technical research papers, VaMoS strongly supported the participation of industrials, starting researchers and project investigators via the organization of dedicated tracks. Altogether, the conference featured four tracks: research, variability in practice, project dissemination and student.

The motto of this 14th edition is openness and diversity. Most of today’s software is made variable to allow for more adaptability and economies of scale, while many development practices (DevOps, A/B testing, parameter tuning, continuous integration...) support this goal of engineering software variants. VaMoS is the ideal venue to explore the underlying problems (automation, traceability, combinatorial explosion...) and their solutions. Moreover, variability is prominent in many systems — not only in software. For those reasons, VaMoS welcomed contributions from related areas (configuration, product lines ...) as well as from new and emerging domains where techniques to manage the complexity induced by variability are applied (cyber-physical systems, security, code branching/merging ...). Topics of interest included:

- Variability modelling and realization
- Automated reasoning on variability
- Variability across the software lifecycle
- Test and verification of variable systems
- Evolution of variability-intensive systems
- Variability mining
- Reverse-engineering of variability
- Variability and quality requirements
- Variability in emerging domains
- Variability in AI methods
- Variability in adaptive systems
- Configuration management
- Runtime variability
- Visualization techniques for variability
- Economic aspects of variability
- Industrial development of variable systems
VaMoS ‘20 received 40 submissions scattered across the different tracks, including 36 papers and 4 extended abstracts. We would like to thank all authors for submitting. All submitted papers underwent a rigorous review process, in which each paper received three reviews. After a careful discussion phase, the international Program Committee decided to accept 19 research papers covering a wide variety of topics. We thank the Program Committee members and all additional reviewers for their help in constituting the program.

The Second International Workshop on Languages for Modelling Variability (MODEVAR 2020) was co-located with VaMoS ’20 and organized as a pre-conference event on the 4th of February. It was a full-day, interactive event where all participants shared knowledge about how to build up a simple feature model language that all the community can agree on. We thank all participants and the dedicated organization team.

The VaMoS ‘20 conference itself featured two keynote talks:

- *Dependency Bugs: The Dark Side of Variability, Reuse and Modularity* by Andrzej Wąsowski (ITU Copenhagen); and
- *Next Steps in Variability Management due to Autonomous Behaviour and Runtime Learning* by Nelly Bencomo (University of Aston, UK).

We are grateful to these invited speakers for accepting our invitation to share their expertise at the conference. Like the previous VaMoS workshops, this year’s edition was a highly interactive event, yet in a slightly different format. Each session was finished by a 30-minute discussion animated by the session chair and involving the paper presenters. We thank all discussants for their participation in the discussions.

We would also like to thank the local organization team headed by Danilo Beuche and Gunter Saake, in particular, we thank Anja Buch, Sandro Schulze, Jacob Krüger, Sebastian Krieter, Kai Ludwig and Ivonne von Nostitz-Wallwitz for their endless support. Finally, we thank the Steering Committee that entrusted us with the organization of the conference.

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