



26th ACM International Systems and Software Product Line Conference

1st TD4ViS Workshop

Technical Debt for Variability-intensive Systems

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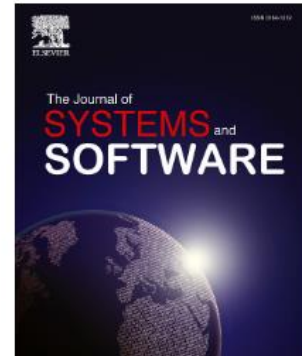

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1st TD4ViS Workshop

Opening and welcome notes

1st TD4ViS Organizers

Jabier Martinez, Tecnalía, Spain



Wesley K. G. Assunção, Johannes Kepler University Linz, Austria, and Pontifical Catholic University of Rio de Janeiro (PUC-Rio), Brazil



Daniele Wolfart, Biopark Education, Brazil



Klaus Schmid, University of Hildesheim, Germany



Apostolos Ampatzoglou, University of Macedonia, Greece



1st TD4ViS

Early 2022, we checked the interest on a TechDebt and Variability workshop among experts with related works

Everyone was very supportive and wanted to contribute. They become organizers or TPC members

- **Alexander Chatzigeorgiou**, University of Macedonia, Greece
- **Antonio Martini**, University of Oslo, Norway
- **Clemente Izurieta**, Montana State University, US
- **Daniel Feitosa**, University of Groningen, Netherlands
- **Elvira-Maria Arvanitou**, University of Macedonia, Greece
- **Ivan Machado**, Federal University of Bahia, Brazil
- **Rafael Capilla**, Rey Juan Carlos University, Spain
- **Rick Rabiser**, Johannes Kepler University Linz, Austria
- **Roberto Verdecchia**, Vrije Universiteit Amsterdam, Netherlands
- **Sandro Schulze**, Technische Universität Braunschweig, Germany
- **Tommi Mikkonen**, University of Helsinki & University of Jyväskylä, Finland
- **Valentina Lenarduzzi**, University of Oulu, Finland
- **Wolfram Fenske**, Pure-Systems, Germany

1st TD4ViS, why?

TechDebt

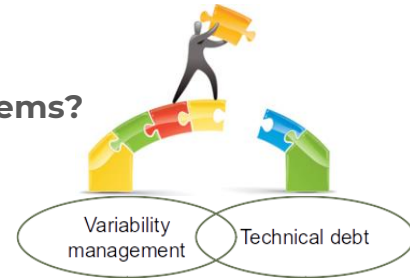
Taking sub-optimal decisions in the development of systems, even if beneficial in the short term, might challenge future maintenance activities and evolution

Variability management

Numerous design and implementation decisions

Variability-intensive systems might accumulate specific types of technical debt, affecting diverse software assets such as requirements, architecture, source code, documentation, tests, etc.

- **What is specific to *variability debt* compared to other types of technical debt?**
- **What are the specifics of managing technical debt in variability-intensive systems?**



1st TD4ViS, why?

Expected outcomes of this 1st edition:

- A concise **definition** of variability debt and characterization including a **catalog of examples**
- A **roadmap** for adaptations or new approaches in technical debt management activities (identification, measurement, prioritization, repayment, monitoring, prevention, representation/documentation, and communication)

Goals

- To set the foundations of variability debt management
- To cross-fertilize the fields of technical debt and variability management

1st TD4ViS, how?

Since the beginning we wanted it to be a discussion-oriented workshop:

We asked two types of contributions

- Lightning talks (4 but finally 3)
- Short papers (1)

The agenda is created in a way that we will hear first all the voices/ideas/perspectives, and then we will have the global discussion

Based on our previous discussions, we consider that the expected outcomes of this workshop is far from trivial

We ask you to listen to the keynotes, lightning talks and short paper presentations trying to integrate their ideas in your concept of variability debt

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Keynotes





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Variability and Technical Debt Ownership

Ipek Ozkaya

*Technical director of Engineering Intelligent
Software Systems group at Carnegie Mellon
University Software Engineering Institute (SEI)*



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**Superset Platforms:
Commodity Functionality
as Technical Debt**

Jan Bosch

14:00	Opening and welcome notes
14:15	Variability and Technical Debt Ownership Ipek Ozkaya
14:45	Superset Platforms: Commodity Functionality as Technical Debt Jan Bosch
15:15	<i>Break (30 min)</i>
15:40	Technical Debt in Start-ups / Scale-Ups Serge Demeyer and Mercy Njima
14:48	Variability Debt in Opportunistic Reuse of Existing Products: Literature analysis and a field study Wesley Klewerton , Jabier Martinez , Daniele Wolfart
15:55	On Variability Debt in Object-Oriented Implementations Johann Mortara
16:03	Variability-aware data migration tool David Romero , Jose A Galindo , José Miguel Horcas and David Benavides
16:13	Working session All
17:50	Closing

