

# Wednesday, August 28th

Wednesday, ROOM Alexandros

**SPPI 1** (11:30-13:00)

Chair: **Dietmar Winkler**

11:30-12:00	<b>SWVP -- A Requirements Prioritization Technique for Global Software Development</b> <i>Nasir Mehmood Minhas, Asif Majeed, Jürgen Börstler, Tony Gorscheck</i>
12:00-12:30	<b>A Tailored Domain Analysis Method for Developing System-Specific Testing DSLs Enabling their Smooth Introduction in Automotive Practice</b> <i>Katharina Juhnke, Matthias Tichy</i>
12:30-13:00	<b>An Extension of the QUAMOCO Quality Model to Specify and Evaluate Feature-Dependent Non-Functional Requirements</b> <i>Philipp Haindl, Reinhold Plöesch</i>

**SPPI 2** (14:30-16:30)

Chair: **Stefan Biffli**

14:30-15:00	<b>Online Controlled Experimentation Randomized for Enterprise: Challenges and Pitfalls</b> <i>Sophia Liu, Aleksander Fabijan, Michael Furchtgott, Somit Gupta, Pawel Janowski, Wen Qin, Pavel Dmitriev</i>
15:00-15:30	<b>A taxonomy for improving industry-academia communication in IoT vulnerability management</b> <i>Sergio Rico, Emelie Engström, Martin Höst</i>
15:30-15:45	<b>Ethical Aligned Design: An empirical evaluation of the RESOLVEDD-strategy in Software and Systems development context</b> <i>Ville Vakkuri, Kai-Kristian Kemell and Pekka Abrahamsson</i>
15:45-16:00	<b>A Tool-Based Approach for Essentializing Software Engineering Practices</b> <i>Kai-Kristian Kemell, Arthur Evensen, Xiaofeng Wang, Juhani Risku, Anh Nguyen Duc, Pekka Abrahamsson</i>
16:00-16:15	<b>Evaluation of the OIRE Method in a Case Study</b> <i>Huishi Yin, Dietmar Pfahl</i>
16:15-16:30	<b>Spotify Tailoring for B2B Product Development – a Large-Scale Mission-Critical Project</b> <i>Abdallah Salameh, Julian Bass</i>

**CBSMS** (17:00-18:15)

Chair: **Stefan Becker**

17:00-17:30	<b>Dynamic Multi-Objective Virtual Machine Placement in Cloud Data Centers</b> <i>Radu Prodan</i>
17:30-18:00	<b>A Cloud-hosted MapReduce Architecture for Syntactic Parsing</b> <i>Yonas Woldemariam, Stefan Pletschacher, Christian Clausner, Julian Bass</i>
18:00-18:15	<b>Programming the Tip of the Iceberg: Software Reuse in the 21st Century</b> <i>Antero Taivalsaari, Niko Mäkitalo, Tommi Mikkonen</i>

Wednesday, ROOM Telemachus I

CPS+ES-IoT (11:30-13:00)

Chair: Karl-Erwin Grosspietsch

11:30-12:00	<b>Performance Analysis of Out-of-Distribution Detection on Various Trained Neural Networks</b> <i>Jens Henriksson, Christian Berger, Markus Borg, Lars Tornberg, Sankar Raman Sathyamoorthy, Cristofer Englund</i>
12:00-12:15	<b>Exploring Virtual Reality as an Integrative Software Development Environment for Cyber-Physical Systems</b> <i>Tommi Mikkonen, Kai-Kristian Kemell, Petri Kettunen, Pekka Abrahamsson</i>
12:15-12:30	<b>The Automotive Take on Continuous Experimentation: A Multiple Case Study</b> <i>Federico Giaimo, Hugo Andrade, Christian Berger</i>
12:30-13:00	<b>Holistic Modeling of Time Sensitive Networking in Component-based Vehicular Embedded Systems</b> <i>Saad Mubeen, Mohammad Ashjaei, Mikael Sjödin</i>

AI4SE/SE4AI (14:30-16:00)

Chair: Robert Feldt

14:30-15:00	<b>Data Management Challenges for Deep learning</b> <i>Aiswarya Raj, Jan Bosch, Helena Holmstrom, Anders Arpteg, Björn Brinne</i>
15:00-15:30	<b>Software Challenges in Heterogeneous Computing: A Multiple Case Study in Industry</b> <i>Hugo Andrade, Lucy Lwakatare, Ivica Crnkovic, Jan Bosch</i>
15:30-16:00	<b>Exploratory Performance Testing Using Reinforcement Learning</b> <i>Tanwir Ahmad, Adnan Ashraf, Dragos Truscan, Ivan Porres</i>

EsPRESSE/SwBDA (17:00-18:30)

Chair: Andreas Metzger

17:00-17:15	<b>Communication Patterns of Kanban Teams and their Impact on Iteration Performance and Quality</b> <i>Saad Shafiq, Irum Inayat, Muhammad Abbas</i>
17:15-17:45	<b>Quality Assurance Supported by Detecting Emotions Using the True-Depth Camera</b> <i>Simon Andre Scherr, Christian Kammler, Frank Elberzhager</i>
17:45-18:00	<b>Real-time Estimated Time of Arrival prediction system based on historical surveillance data</b> <i>Andrés Munoz Hernandez, David Scarlatti, Pablo Costas</i>
18:00-18:15	<b>SpecTackle - A Specification Mining Experimentation Platform</b> <i>Robert Heumüller, Sebastian Nielebock, Frank Ortmeier</i>
18:15-18:30	<b>ALIDA: a Novel Micro-service Based Platform for Composition, Deployment and Execution of Big Data Applications</b> <i>Davide Profeta, Nicola Masi, Domenico Messina, Davide Dalle Carbonare, Susanna Bonura, Vito Morreale</i>

Wednesday, ROOM Telemachus II

SM 1 (11:30-13:00)

Chair: Carmine Gravino

11:30-12:00	<b>Improved Software Reliability Prediction by using Model Stacking and Averaging</b> <i>Rabia Burcu Karaömer, Barbaros Yet, Oumout Chouseinoglou</i>
12:00-12:30	<b>Commit Messages and Fault-Proneness</b> <i>Maria Caulo, Giuseppe Scanniello</i>
12:30-12:45	<b>An Evaluation Approach for Selecting Suitable Defect Prediction Method at Early Phases</b> <i>Rana Özakıncı, Ayça Tarhan</i>

**SM 2 (14:30-16:30)**

Chair:

14:30-15:00	<b>Measureability of functional size in Agile software projects: Multiple case studies with COSMIC FSM</b> <i>Tuna Hacaloglu, Onur Demirors</i>
15:00-15:30	<b>Estimating the maintenance effort of JavaScript Applications</b> <i>Ioannis Zozas, Matina Bibi, Apostolos Ampatzoglou, Panagiotis Sarigiannidis</i>
15:30-16:00	<b>Using Bio-inspired Feature Selection Algorithms in Software Effort Estimation: A Systematic Literature Review</b> <i>Asad Ali, Carmine Gravino</i>
16:00-16:30	<b>Analogy Software Effort Estimation Using Ensemble KNN Imputation</b> <i>Ibtissam Abnane, Mohamed Hosni, Ali Idri, Alain Abran</i>

**SM 3 (17:00-18:30)**Chair: **Panagiotis Katsarsos**

17:00-17:30	<b>A Comparative Study of Vectorization Methods on BugLocator</b> <i>Sousuke Amasaki, Hirohisa Aman, Tomoyuki Yokogawa</i>
17:30-18:00	<b>Word Embeddings for Comment Coherence</b> <i>Alfonso Cimasa, Anna Corazza, Carmen Coviello, Giuseppe Scanniello</i>
18:00-18:15	<b>Software Models for Source Code Maintainability: A Systematic Literature Review</b> <i>Giuseppe Scanniello, Maria Teresa Baldassarre, Simone Romano, Danilo Caivano</i>

## Thursday, August 29th

Thursday, ROOM Alexandros

### SM 4 (11:30-13:00)

Chair: **Sousike Amasaki**

11:30-12:00	<b>Requirements' Characteristics: How do they Impact on Project Budget in a Systems Engineering Context?</b> <i>Panagiota Chatzipetrou, Michael Unterkalmsteiner, Tony Gorschek</i>
12:00-12:30	<b>Evaluating Software Security Change Requests: A COSMIC-based Quantification Approach</b> <i>Mariem Haoues, Asma Sellami, Hanene Ben-Abdallah, Onur Demirors</i>
12:30-13:00	<b>Expectations on the Product Owner Role in Industry – A Scrum Team's Point of View</b> <i>Carolin Unger-Windeler, Kurt Schneider</i>

### SM 5 (14:30-16:30)

Chair: **Onur Demirors**

14:30-15:00	<b>Sharing of vulnerability information among companies -- a survey of Swedish companies</b> <i>Thomas Olsson, Martin Hell, Martin Höst, Ulrik Franke, Markus Borg</i>
15:00-15:30	<b>Understanding Ecosystems Risks in Software Startups: A Study with Students</b> <i>Luciana Almeida, Cleidsob de Souza</i>
15:30-16:00	<b>Requirements for Measurement Dashboards and their Benefits: A study of Start-ups in East Africa</b> <i>Kamulegeya Grace Bugembe, Raymond Mugwanya, Regina Hebig</i>
16:00-16:30	<b>Applying a traditional software development process to drive innovative projects in higher education</b> <i>Rafal Wlodarski, Aneta Poniszewska-Maranda</i>

Thursday, ROOM Telemachus I

### SMSE 1 (11:30-13:00)

Chair: **Steve Swift**

11:30-12:00	<b>Search Strategy to Update Systematic Literature Reviews in Software Engineering</b> <i>Emilia Mendes, Katia Felizardo, Claes Wohlin, Marcos Kalinowski</i>
12:10-12:30	<b>Quality and success in open source software: a systematic mapping</b> <i>Bahar Gezici, Nurseda Özdemir, Nebi Yilmaz, Evren Coşkun, Ayça Tarhan and Oumout Chouseinoglou</i>
12:30-13:00	<b>Non-functional Requirements Prioritization: A Systematic Literature Review</b> <i>Khushbakhat Ijaz, Irum Inayat, Faiza Allah Bukhsh</i>

### SMSE 2 (14:30-16:30)

Chair: **Steve Counsell**

14:30-15:00	<b>Using a Systematic Literature Review to Strengthen the Evidence Supporting a Simulation Model of Distributed Software Projects</b> <i>Adailton Lima, Cleidson de Souza, Rodrigo Quites Reis</i>
15:00-15:30	<b>Partnership Models for Software Ecosystems: A Systematic Mapping Study</b> <i>Ítalo Belo, Carina Alves</i>
15:30-16:00	<b>Dependable Fog Computing: A Systematic Literature Review</b> <i>Zeinab Bakhshi, Guillermo Rodriguez-Navas, Hans Hansson</i>
16:00-16:30	<b>A systematic mapping study of value-based software engineering</b> <i>Norsaremah Salleh, Fabiana Mendes, Emilia Mendes</i>

Thursday, ROOM Telemachus II

SPPI/SEaTeD (11:30-13:00)

Chair: **Stefan and Antonio**

11:30-12:00	<b>Business as Unusual: A Model for Continuous Real-Time Business Insights Based on Low Level Metrics</b> <i>Iris Figalist, Christoph Elsner, Jan Bosch, Helena Holmström Olsson</i>
12:00-12:30	<b>How Regulations of Safety-Critical Software Affect Technical Debt</b> <i>Terese Besker, Antonio Martini, Jan Bosch</i>
12:30-12:45	<b>Evaluating the impact of refactoring code smells on the energy consumption of Android applications</b> <i>Hina Anwar, Dietmar Pfahl, Satish N. Srirama</i>
12:45-13:00	<b>Reusing Code from StackOverflow: The Effect on Technical Debt</b> <i>Nikolaos Nikolaidis, Georgios Digkas, Apostolos Ampatzoglou, Alexander Chatzigeorgiou</i>

SEaTeD/EBEDE (14:30-16:30)

Chair: **Apostolos and Alexander**

14:30-15:00	<b>On the Accuracy of SonarQube Technical Debt Remediation Time</b> <i>Nyyti Saarimaki, Maria Teresa Baldassarre, Valentina Lenarduzzi, Simone Romano</i>
15:00-15:30	<b>Domain Level Technical Debt</b> <i>Marcus Ciolkowski, Harald Störrle</i>
15:30-15:45	<b>A Study on Architectural Smells and Prediction</b> <i>Francesca Arcelli Fontana, Paris Avgeriou, Ilaria Pigazzini, Riccardo Roveda</i>
15:45-16:00	<b>Technical Debt in Data-Intensive Software Systems</b> <i>Harald Foidl, Michael Felderer, Stefan Biffel</i>
16:00-16:15	<b>Technical Debt Analysis in Parallel Multi-Disciplinary Systems Engineering</b> <i>Stefan Biffel, Fajar Ekaptura, Arndt Lüder, Joahna Pauly, Felix Rinker, Laura Waltersdorfer, Dietmar Winkler</i>
16:15-16:30	<b>Comparing Insights Derived Using Manual Inductive Qualitative Analysis Versus Automated NLP Algorithms for Analyzing User Verbatim Feedbacks In Digital Randomized Controlled Experiments</b> <i>Paul Li, Connie Yang, Sophia Liu, Mary Hu</i>

## Friday, August 30th

Friday, ROOM Alexandros

**A-BPM/SMSE (11:30-13:00)**

Chair: **Werner Schmidt**

11:30-12:00	<b>A Method-wise Approach for Selecting the Most Suitable Business Process Modelling Notation</b> <i>Gianna Reggio, Maurizio Leotta</i>
12:00-12:30	<b>Collection and Synthesis of Design Parameters for the Transfer of Agility from Software Engineering to Process Management</b> <i>Lederer Matthias, Oleksandra Popova, Werner Schmidt</i>
12:30-13:00	<b>Bug Bounty Programs – a Mapping Study</b> <i>Ana Magazinius, Niklas Mellegård, Linda Olsson</i>

Friday, ROOM Telemachus I

**MDEMS 1 (11:30-13:00)**

Chair:

11:30-12:00	<b>Impediments to Introducing Continuous Integration for Model-Based Development in Industry</b> <i>Robbert Jongeling, Jan Carlson, Antonio Cicchetti</i>
12:10-12:30	<b>Contextual and Relational Role-Based Modeling Framework</b> <i>Thomas Kühn, Christopher Werner, Hendrik Schön, Zhenxi Zhao, Uwe Assmann</i>
12:30-13:00	<b>Towards a descriptive language to explicit timing verification tests of critical real-time systems</b> <i>Thanh Dat Nguyen, Yassine Ouhammou, Emmanuel Grolleau</i>

**MDEMS 2 (14:30-15:15)**

Chair:

14:30-15:00	<b>Query-based Impact Analysis of Metamodel Evolutions</b> <i>Ludovico Iovino, Adrian Rutle, Juri Di Rocco, Alfonso Pierantonio</i>
15:00-15:15	<b>MATERA2-AIfTester: An Exhaustive Simulation and Test Generation Tool for fUML Models</b> <i>Junaid Iqbal, Adnan Ashraf, Dragos Truscan, Ivan Porres</i>

**Work in Progress (15:30-17:00)**

Chair: **Karl-Erwin Grosspietsch**

15:30-15:40	<b>Towards Competency Change Framework for Software Engineers</b> <i>Nana Assyne</i>
15:40-15:50	<b>Bringing MoVES Towards Consolidated Electrical/Electronic Automotive Architectures</b> <i>Alessio Bucaioni, Saad Mubee</i>
15:50-16:00	<b>Security Engineering for Cyber Physical Systems</b> <i>Peter Langendoerfer</i>
16:00-16:10	<b>Engineering of Resilient Crypto-Hardware: Balancing between FI and SCA Resistance</b> <i>Zoya Dyka, Ievgen Kabin, Dan Klann, Peter Langendoerfer</i>
16:10-16:20	<b>Influence of Synopsys Design Compiler Options on the Success Horizontal DPA Attacks</b> <i>Ievgen Kabin, Zoya Dyka, Dan Klann, Peter Langendoerfer</i>
16:20-16:30	<b>A New Approach to the Compact Models Parameters Extraction of High Reliability Microelectronic Devices</b> <i>Viktor Stempitsky, Ivan Lovshenko, Mikhail Kutas, Anatoly Belous, Vitaly Solodukha</i>
16:30-16:40	<b>Software Architecture for Autonomous UAVs for Power Line Inspection</b> <i>Liping Shi, Néstor J. Hernández Marcano, Rune Hylsberg Jacobsen, Golizheh Mehrooz, Emad Ebeid, Peter Schneider-Kamp</i>
16:40-16:50	<b>Authentication and Secure Communication for Embedded Systems</b> <i>Simona Buchovecká, Róbert Lórencz, Jirí Bucek, Filip Kodýtek</i>
16:50-17:00	<b>Configurable Fault Tolerant Circuits and System Level Integration for Self-Awareness</b> <i>Raphael Segabinazzi Ferreira, Nevin George, Junchao Chen, Michael Hübner, Milos Krstic, Jörg Nolte, Heinrich T. Vierhaus</i>