



SEAA 2023 Conference, Durres, Albania, 6th-8th September, 2023 Programme

1.9.2023

Wednesday, 6th September 2023							
Time	ROOM2	ROOM 4	ROOM 6	ROOM C			
07:30-08:30		Registration					
08:30 - 09:00	Welcome Session (Organizers, PC Chairs), ROOM 1						
09:00 -10:00	Keynote 1 (DSD), ROOM1						
10:00 - 10:30	Coffee Break						
10:30 - 12:00	Session 1: (SPPI) Session chair: Dietmar Winkler	Session 2: (DAIDE) Session chair: Helena Holmström Olsson and Jan Bosch	Session 3: (SM-STREAM) Session chair: Onur Demirors and Konstantinos Georgiou	Disseminations, Demo, Exebitions			
	3236 Alejandra Duque-Torres, Claus Klammer, Dietmar Pfahl,	2037 Sonja Hyrynsalmi, Jan Bosch and Helena Holmström Olsson	6275 Giammaria Giordano, Giulia Sellitto, Aurelio Sepe, Fabio Palomba				
	Stefan Fischer and Rudolf Ramler Towards Automatic Generation of Amplified Regression Test Oracles FULL	Towards an integration management maturity FULL	and Filomena Ferrucci The Yin and Yang of Software Quality: On the Relationship between Design Patterns and Code Smells FULL				
	220 Yuki Fushihara, Hirohisa Aman, Sousuke Amasaki, Tomoyuki Yokogawa and Minoru Kawahara A Trend Analysis of Test Smells in Python Test Code Over Commit History SHORT	2333 Hongyi Zhang, Jan Bosch and Helena Holmström Olsson QuaFedAsync: Quality-based Asynchronous Federated Learning for the Embedded Systems SHORT	7327 Michelangelo Esposito, Simone Romano and Giuseppe Scanniello Test-Driven Development and Embedded Systems: An Exploratory Investigation FULL				
	8421 Alejandra Duque-Torres, Dietmar Pfahl, Claus Klammer and Stefan Fischer Exploring a Test Data-Driven Method for Selecting and Constraining Metamorphic Relations FULL 2527 Mahum Adil, Ilenia Fronza, Outi Sievi-Korte, Tommi Mikkonen, Luis Corral and Salum Abdul-Rahman 'Let's Discuss it in a Team Meeting!' Collaboration Challenges of Distributed Software Design	8149 Teodor Fredriksson, Jan Bosch and Helena Holmström Olsson Classification of Complex-Valued Radar Data using Semi-Supervised Learning: a Case Study SHORT 1210 Yumo Luo, Mikko Raatikainen and Jukka K. Nurminen Autonomously Adaptive Machine Learning Systems: Experimentation- Driven Open-Source Pipeline FULL	406 Dario Di Dario, Valeria Pontillo, Stefano Lambiase, Filomena Ferrucci and Fabio Palomba Security Testing in The Wild: An Interview Study FULL 7359 Sabato Nocera, Simone Romano, Rita Francese and Giuseppe Scanniello A Large-scale Fine-grained Empirical Study on Security Concerns in Open-source Software FULL				
	SHORT 3159 Anas Dakkak, Jan Bosch and Helena Holmström Olsson DevServOps: DevOps For Product-Oriented Product-Service Systems SHORT	747 Asato Yamazaki, Takayuki Nishio and Yuko Hara-Azumi Convergence Improvement by Parameters Exchange in Asynchronous Decentralized Federated Learning for Non-IID Data FULL	7019 Majd Soud, Ilham Qasse, Grischa Liebel and Mohammad Hamdaqa AutoMESC: Automatic Framework for Mining and Classifying Ethereum Smart Contract Vulnerabilities and Their Fixes FULL				
12:00 - 13:00 13:00 - 14:30		Keynote 2 (DSD), ROOM 1 Lunch Break					
14:30 - 16:00	Session 4: (SPPI) Session chair: Dietmar Winkler	Session 5: (DAIDE) Session chair: Jan Bosch	Session 6: (SM-STREAM) Session chair: Gemma Catolino	Disseminations, Demo, Exebitions			
	2640 Helena Holmström Olsson and Jan Bosch All data is equal or is some data more equal? On strategic data collection and use in the embedded systems domain FULL	606 Federica Filippini, Boris Lublinsky, Maximilien de Bayser and Danilo Ardagna Performance Models for Distributed Deep Learning Training Jobs on Ray SHORT	2804 Hannes Salin Thrifty Guardians: Overcoming the Challenges of Establishing Security Champions on a Limited Budget FULL				
	3723 Umar Iftikhar, Jürgen Börstler and Nauman Bin Ali On potential improvements in the analysis of the evolution of themes in code review comments FULL	8934 Monika Steidl, Valentina Golendukhina, Michael Felderer and Rudolf Ramler Automation and Development Effort in Continuous Al Development: A Practitioners' Survey FULL	8647 Sabato Nocera, Simone Romano, Rita Francese, Riccardo Burlon and Giuseppe Scanniello Managing Vulnerabilities in Software Projects: the Case of NTT Data FULL				
	7136 Muhammad Ovais Ahmad, Tomas Gustavsson and Hina Saeeda Customised Roles in Scrum Teams And Development of Secure 5G Solution FULL	7971 Meenu Mary John, Helena Holmström Olsson, Jan Bosch and Daniel Gillblad Advancing MLOps from Ad hoc to Kaizen FULL	6500 Gabriele De Vito, Stefano Lambiase, Fabio Palomba and Filomena Ferrucci Meet C4SE: Your New Collaborator for Software Engineering Tasks SHORT				
	5220 Krishna Ronanki, Christian Berger and Jennifer Horkoff Exploring New Frontiers: ChatGPT's Application in Requirements Elicitation Process FULL	2055 Shady Hegazy, Christoph Elsner, Jan Bosch and Helena Holmström Olsson Analytics and Data-Driven Methods and Practices in Platform Ecosystems: a systematic literature review FULL	1251 Ondřej Kuhejda and Bruno Rossi Pull Requests Acceptance: A Study Across Programming Languages FULL				
	4240 Torvald Mårtensson and Kristian Sandahl Stop Looking for the Perfect All-Round Tester SHORT						
16:00 - 16:30		Coffee Break					
19:30	Social life, Welcome Cocktails						





	Thursday, 7th September 2023							
Time	ROOM 2	ROOM 4	ROOM 6	ROOM C				
09:00 -10:00	Keynote Nicole Novielli (SEAA). Session Chair: Dario Di Nucci, ROOM 1							
10:00 - 10:30	Coffee Break							
10:30 - 12:00	Session 7: (MDEML) Session chair: Alessio Bucaioni	Session 8: (DAIDE) Session chair: Jan Bosch	Session 9: (SM-STREAM) Session chair: Carmine Gravino	Disseminations, Demo, Exebitions				
	2941 Thomas Goldschmidt, Sean Brady and Nandan Rao A Holistic	8516 Tim Yarally, Luís Cruz, Daniel Feitosa, June Sallou and Arie van	6207 Steve Counsell, Emily Winter, Tracy Hall and Vesna Nowack The					
	Approach to Information Modeling in the Tax Compliance Domain FULL	Deursen Batching for Green AI - An Exploratory Study on Inference FULL	Paradox of Analysing Gender-Based Data SHORT					
	5690 Karl Kegel and Sebastian Götz Towards Variability-Aware Instance Handling for Model Evolution at Runtime FULL	6715 Milad Abdullah, Lubomír Bulej, Tomáš Bureš, Vojtěch Horký and Petr Tůma Early Stopping of Non-productive Performance Testing Experiments Using Measurement Mutations FULL	5035 Steve Counsell, Stephen Swift and Amjed Tahir An "80-20" Approach to the Study of Coupling SHORT					
	Analysis Components for Cyber-Physical Production Systems SHORT	4665 Xhulja Shahini, Domenic Bubel and Andreas Metzger Variance of ML-based software fault predictors: are we really improving fault prediction? FULL	3677 Hüseyin Ünlü, Tuna Hacaloglu, Neslihan Küçükateş Ömüral, Neslihan Çalışkanel, Onur Leblebici and Onur Demirors An Exploratory Case Study on Effort Estimation in Microservices SHORT					
	4637 Xingyu Liu, Hossain Muhammad Muctadir, Mark van den Brand and René van de Molengraft ML-based Digital Twin for anomaly detection: a case-study on Turtle soccer robots SHORT	1806 Konstantinos Georgiou, Konstantinos Papageorgiadis, Georgios Christidis, Konstantinos Charmanas, Nikolaos Mittas and Lefteris Angelis A data-driven framework for knowledge exchange analysis of development issues in medical applications: A case study of COVID-19 FULL	2954 Rafael Capilla, Francesca Arcelli Fontana, Tommi Mikkonen, Paolo Bacchiega and Victor Salamanca Detecting Architecture Debt in Micro-Service Open-Source Projects FULL					
12:00 - 13:00	Keynote 4 (DSD), ROOM 1							
13:00 - 14:30	Reynole 4 (1957), 400M 1							
14:30 - 21.00	Social Event (Excursion)							
21:00	Social Event Galla Dinner							





		Friday, 8th September 2023					
Time	ROOM 2	ROOM4	ROOM 6	ROOM C			
9:00 - 10:00		Keynote Ludovik Coba (SEAA). Session Chair	: Valentina Lenarduzzi				
10:00 - 10:30							
10:30 - 12:00	Session 10: (ECT) Session chair: Shaukat Ali	WiP (Works in Progress Oral Session)	Session 12: (SMSE-DAIDE) Session chair: Steve Counsell and Torvald Martensson	Disseminations, Demo, Exebitions			
	8263 Dario Di Dario, Umberto Bilotti, Maurizio Sibilio, Carmine Gravino and Fabio Palomba Toward a Secure Educational Metaverse: A Tale of Blockchain Design for Educational Environments FULL		5.149 Sirisha Bai Gowardhan Rao, Julieth Patricia Castellanos Ardila and Sasikumar Punnekkat A Systematic Review of β-factor Models in the Quantification of Common Cause Failures FULL				
	2222 Xabier Iturbe, Xabier Alberdi, Ander Aramburu, Armando Astarloa, Iñigo Barandiaran, Koldo Basterretxea, Angélica Dávila, Asier Erramuzpe, Iñigo Gabilondo, Garkiotiz Lerma-Usabiaga, Lisandro Monsalve, Libe Mori, Javier Navaridas, Jose Antonio Pascual, Joaquin Piriz, Serafim Rodrígues, Oscar Seijo, Ander Soraluze, Edgar Soria, Ignacio Torres, Nerea Uriarte and Juan Luis Vallerdi SiliconBurmuin: A Horizon Europe propelled Neurocomputing Initiative in the Basque Country EUP FULL		5647 Kseniia Vasylieva, Marco Kuhrmann, Meenu Kadavilveetil Xavier and Jil Klünder How Agile Are you? Discussing Maturity Levels of Agile Maturity Models FULL				
	6158 Silverio Martínez-Fernández, Xavier Franch and Francisco Durán López Towards green Al-based software systems: an architecture-centric approach (GAISSA) EUP FULL		9926 Wander Siemers, June Sallou and Luís Cruz The Two Faces of Al in Green Mobile Computing: A Literature Review FULL				
			1997 Gabriele De Vito, Fabio Palomba, Carmine Gravino, Sergio Di Martino and Filomena Ferrucci ECHO: An Approach to Enhance Use Case Quality Exploiting Large Language Models FULL				
			8190 Valerio Bellandi, Samira Maghool and Stefano Siccardi An NLP- based statistical reporting methodology applied to court decisions SHORT				
12:00 - 13:30		Lunch Break					
13:30 - 15:00	Session 13: (SMSE) Session chair: Stephen Swift	Session 14: (ECT) Session chair: Davide Taibi	Session 15: (CPS) Session chair: Verena Klös	Disseminations, Demo, Exebitions			
	8868 Stefan Huber, Tobias Lorey and Michael Felderer Techniques for Improving the Energy Efficiency of Mobile Apps: A Taxonomy and Systematic Literature Review FULL	2767 João Francisco Lino Daniel, Thatiane de Oliveira Rosa, Alfredo Goldman and Eduardo Guerra Towards the Detection of Microservice Patterns Based on Metrics FULL	6888 Ali Nouri, Christian Berger and Fredrik Törner On STPA for Distributed Development of Safe Autonomous Driving: An Interview Study FULL				
	8931 Adriano Vogel, Sören Henning, Otmar Ertl and Rick Rabiser A systematic mapping of performance in distributed stream processing systems FULL	5249 Somnath Mazumdar and Thomas Dreibholz Towards A Data Privacy-Aware Execution Zone Creation in Cloud/Fog Platform FULL	7207 Milko Monecke, Varun Gowtham and Thomas Magedanz A Distributed Task Scheduling Framework for Edge Computing and Cyber-Physical Systems FULL				
	6233 Maliha Tasnim, Maruf Rayhan, Zheying Zhang and Timo Poranen A Systematic Literature Review on Requirements Engineering Practices and Challenges in Open-Source Projects FULL	7997 Santiago del Rey, Silverio Martínez-Fernández, Luís Cruz and Xavi Franch Do DL models and training environments have an impact on energy consumption? FULL	7665 Wanqi Zhao, Johannes Mey, René Schöne, Sebastian Götz and Uwe Assmann RobotRAGs: A Reference Attribute Grammar- based Integration Approach for Robotic Assembly Lines FULL				
			4988 Marcel Weller, Sandro Speth, Georg Reißner and Steffen BeckerThe Mechatroni UML Code Generator for Distributed Cyber- Physical Systems SHORT				
15:00-15:15		Coffee Break					
	ROOM 2	ROOM 4	ROOM 6	ROOM C			
15:15 - 16:45		Disseminations, Demo, Exebitions					
	DSD2023						
16:45 NOTES:	Durration of pressentation	Closing Session (Organizers, PC C	Chairs)				

LONG: 20min, 15min +5min (discussion)
SHORT: 15 min, 10min +5min (discussion)
NUMBER OS SLIDES: 1 per min
ROOM 1-6: Working Rooms
ROOM C: Common Room