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# Lean and Agile Software Development

5th International Conference, LASD 2021  
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Proceedings

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# Preface

As COVID-19 swept the world in early 2020, countries began putting their citizens under partial or total lockdown, while software companies started implementing remote-working policies for many or all of their employees. The pandemic had an almost immediate effect on agile software development, since agile work practices are harder to perform when casual conversations are limited due to the online nature of meetings and interactions. Nevertheless, more than ever before, the agile mindset and practices have turned out to be vital for organizations to navigate through the new terrain. In this setting, the LASD (Lean and Agile Software Development) conference series and the community feel particularly proud of their contributions to research and practice investigating how to stay Agile while working remotely during the pandemic.

In 2021, LASD separated from FedCSIS and became a standalone conference that took place virtually on 23 January 2021 as an online event. As everyone involved in LASD 2021 worked voluntarily, the conference was fully free of charge. LASD 2021 received 32 submissions. After a rigorous review process, which included at least 3 reviews per submission, 10 high-quality full papers and 2 short papers were selected. The accepted papers were presented to a well-focused audience, thus the discussion provided the authors with new ideas and directions for further research. Topics discussed in this volume range from teams under COVID-19 through women in Agile, to product roadmapping and non-functional requirements.

Corresponding authors of all accepted papers received a complimentary 1 year membership in [Agile Alliance](#). Agile Alliance is a nonprofit global member organization dedicated to promoting the concepts of Agile software development as outlined in the Agile Manifesto. With more than 75,000 members and subscribers around the globe, Agile Alliance is driven by the principles of Agile methodologies and the value delivered to developers, business, and end users. Agile Alliance organizes and supports events to bring the Agile community together on an international scale. Besides, the corresponding author of the best paper received a prize of a [TeamRetro](#) single team access for 12 months.

The high quality of the LASD 2021 technical program was enhanced by two keynote lectures delivered by outstanding guests: Philipp Diebold (“Agility Yesterday, Today & Tomorrow”) and Sanjay Misra (“Pair Programming: An Empirical investigation in an Agile Software Development environment”).

To live the agile mindset, the LASD conference focuses on highly relevant research outcomes and fosters their way into practice. We believe the highest value produced by a conference is that researchers’ outcomes are pulled by practitioners from industry to integrate them into innovative products and services.

We would like to express our gratitude to everyone who made LASD 2021 successful. First of all, we thank all authors for their contributions, the members of the Program Committees for taking the time and effort to provide insightful remarks, as well as both keynote speakers for their impressive speeches. We are also deeply

grateful to Ivan Luković for the opportunity to publish an extended version of the best paper in Computer Science and Information Systems (ComSIS). Furthermore, we acknowledge Dominik Grzegorzek for LaTeX typesetting assistance. Finally, we would like to thank the team at Springer (especially Ralf Gerstner, Christine Reiss, Alfred Hofmann, Anna Kramer, Guido Zosimo-Landolfo, Ramvijay Subramani, and Anja Seibold) for making this volume possible.

We hope that you find this monograph useful for your professional and academic activities, and we wish you a stimulating read. We also cordially invite you to visit our conference website at <https://lasd.pl>, and to join us for the upcoming edition.

January 2021

Adam Przybyłek  
Jakub Miler  
Alexander Poth  
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