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Nota di contenuto	Intro -- Preface -- Organization -- Conference Chair -- Program Chair -- Program Committee -- Additional Reviewers -- Invited Speakers -- Contents -- Application of Photogrammetric Object Reconstruction for Simulation Environments in the Context of Inland Waterways -- 1 Introduction -- 2 Toolchain -- 3 Changes for the Application at Inland Waterways -- 4 Comparison of the Photogrammetric Reconstruction Programs -- 4.1 Quality -- 4.2 Computational Effort -- 5 Conclusion -- 6 Outlook -- References -- On-demand Simulation of Future Mobility Based on Apache Kafka -- 1 Introduction -- 2 Related Work -- 3 Architecture -- 3.1 Communication -- 3.2 Scenario Description -- 3.3 Simulation Domain and Layer -- 3.4 Life-Cycle of a Simulation Scenario -- 4 Publish/Subscribe Communication -- 4.1 Quality of Service -- 4.2 Kafka -- 4.3 Topic Structure -- 5 Distributing Simulation Scenarios -- 5.1 Partitioned Simulations -- 5.2 Multi-level Simulations -- 5.3 Co-simulations -- 6 Time Synchronization -- 6.1 Time Synchronization Paradigms -- 6.2 Implemented Synchronization Mechanism -- 7 Performance Evaluation -- 8 Conclusion -- References -- Augmentation of Sunflower-Weed Segmentation Classification with

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#### Sommario/riassunto

This book includes a set of selected best-extended papers from the 10th International Conference on Simulation and Modeling Methodologies, Technologies and Applications (SIMULTECH 2020) that was held as an online event from July 8 to 10, 2020. The conference brought together researchers, engineers, and practitioners interested in methodologies and applications of modeling and simulation. New and innovative solutions are reported in this book. A selection was made after the conference, based also on the conference chairs assessment, reviewers' assessment, quality of presentation, and audience interest, so that this book includes the extended and revised versions of the very best papers of the conference. .