

**Proceedings of  
23<sup>rd</sup> Workshop on  
Requirements Engineering**

**WER 2020**



**São José dos Campos, São Paulo, Brazil**

**August 24-28, 2020**

## **Preface**

The Workshop on Requirements Engineering 2020 is now in its twentieth-third edition. This series of workshops on the area started in 1998 as a meeting of the Ibero-American requirements engineering community, but along the years it has attracted attention from researchers and practitioners from other parts of the world.

The Workshop on Requirements Engineering provides an open and active forum for researchers and practitioners, to present and discuss their work, to exchange experiences and to look for prospective collaborations in the field of requirements engineering. Even though the Workshop is based on communications obtained by means of standard "call for papers", the discussion among attendants is privileged and encouraged during the meeting.

This year, WER is organized by the Universidade Federal de São Paulo (UNIFESP) and the Instituto Tecnológico de Aeronáutica (ITA) from São José dos Campos – Brazil. Due to the COVID-19 pandemic, the event was held remotely as a week-long virtual event through a videoconferencing platform.

We have received 42 abstracts, and finally 35 papers were submitted. Each submitted paper was reviewed by three program committee members, resulting in a total of 105 reviews. After the reviewing process and a discussion phase, 21 papers were accepted, being 19 full papers and 2 short ones, with an acceptance rate of 0.60.

Presentations are organized in nine technical sessions, including two keynote speakers, three invited practitioner talks and a discussion panel, distributed along the five days of the workshop.

In this edition, the renowned researchers Dr. Tony Gorschek from the Blekinge Institute of Technology and Dr. Marcelo José Ruy Lemes from EMBRAER were the keynote speakers. This edition also featured three invited lectures from practitioners related to the state-of-the-practice in Requirements Engineering and, finally, a panel session.

As program co-chairs, we would like to thank the international Program Committee, belonging to several different countries, for contributing to improve papers quality. We would like also to thank the authors for submitting valuable contributions; the General Chairs Jaelson Castro and Julio Leite; the local organization members for making possible to carry out the workshop virtually and also for their hard work done to make this event economically sustainable; the panelists for the possibility of interchange between industry and academy; and the participants for their interest in the Requirements Engineering themes that this workshop encourages to disseminate.

Lastly, we hope that you not only enjoy the high-quality papers in these proceedings, but also their video presentations available in the WER 2020 YouTube channel.

*Proceedings of the 23rd Workshop on Requirements Engineering (WER 2020)*

August 2020

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WER 2020 Program Committee Chairs

## **Accepted Papers**

“Improving the selection of requirements elicitation techniques: a faceted guide”. Rafael Crispim Ignácio and Fabiane Benitti.

“Survey Evaluation of an Approach for Dynamic Software Product Lines”. Gabriela Guedes, Carla Silva and Monique Soares.

“REACT-M: O Relato de um Estudo de Caso de Aplicação de um Método Ágil para Gerência de Requisitos de Software”. Sandro Oliveira and Bleno Silva.

“Safety Requirements and Risk Analysis Related to Insulin Infusion Pumps: A Systematic Review”. Felipe Rocha and Luiz Eduardo Galvão Martins.

“Hacia la Evaluación Automática de la Calidad de los Requerimientos de Software usando Redes Neuronales Long Short Term Memory”. Guadalupe Gramajo, Luciana C. Ballejos and Mariel Ale.

“Suporte ao rastreamento de requisitos na ferramenta JGOOSE”. Victor Pozzan, Gustavo Cesar Lopes Geraldino, Victor Santander and Ivonei Silva.

“Comunicação de Requisitos em Quadros Kanban Virtuais”. Jullia Saad, Priscila Portela Costa and Luciana Zaina.

“SPIDE para a Elicitação de Requisitos integrada ao Design de Interação: qual a percepção de especialistas em desenvolvimento de software?”. Jean Rosa, Beatriz Brito, Filipe Garrido, Pedro Valente, Nuno Nunes and Ecivaldo Matos.

“Identificação de Requisitos de Segurança para Experimentos Científicos Embarcados”. Heuller Procópio, Carlos Lahoz and Luiz Eduardo Galvão Martins.

“Requirements for a Software Audit Model in Safety-Critical Domain”. Talita Marques Ruiz Slavov, Johnny Cardoso Marques and Luiz Eduardo Galvão Martins.

“Uma Ferramenta para Construção de Catálogos de Padrões de Requisitos com Comportamento”. Taciana Kudo, Renato Bulcão-Neto and Auri Marcelo Rizzo Vincenzi.

“Problemas do Design Thinking para a Engenharia de Requisitos: uma Revisão Sistemática da Literatura”. Fábio Pinto and Fábio Siqueira.

“Descrevendo Requisitos de User eXperience em Critérios de Aceitação de User Stories”. Jonathan H. J. Souza, Leonardo C. Marques, Tayana U. Conte and Luciana A. M. Zaina.

“JiStar - Rastreabilidade entre Código Java e Modelos de Metas i\*”. Ana M. M. Moura and Julio Cesar Leite.

“Os Benefícios do Uso de Ontologias em Sistemas Embarcados”. Aêda Sousa, Timoteo Silva, Letícia Lima and Fernanda Alencar.

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“Negociação-Colaboração para a Qualidade de Requisitos de Qualidade”. Giovana Linhares and Julio Leite.

“Empathy and Creativity in Privacy Requirements Elicitation: Systematic Literature Review”. Anderson Jefferson Cerqueira, Edna Dias Canedo and Angelica Toffano Seidel Calazans.

“Conflitos na ER: Proposta de uma Atividade de Narrativa com auxílio de Realidade Aumentada”. Maria Lencastre Cruz, Aline Barbosa, Patrícia Mergulhão and Camila Andrade.

“Avaliando a Aderência de Operacionalizações com o Processo de Engenharia de Requisitos do MPS-SW Baseado no Catálogo de Transparência de Software”. Ana Clara Silva, Henrique Sousa, Eduardo Almentero and Júlio Leite.

“NFR4ES: Um Catálogo de RNFs para Sistemas Embarcados”. Reinaldo Silva, Jaelson Castro and João Pimentel.

“Would You Like Better Visualization for Requirements Prioritization and Release Planning?”. João Pimentel and Maria Lencastre.