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Welcome Message

Welcome to the twenty-seventh edition of the Workshop on Requirements Engineering-WER2024.

The workshop will occur on August 7, 8, and 9, 2024, at the University of Belgrano in Buenos Aires, Argentina. The event is organized by the Universidad Nacional del Oeste (UNO), the Universidad Abierta Interamericana (UAI), the Universidad Nacional de La Plata (UNLP) and the University of Belgrano. The event brings together participants from academia and industry for three days of engaging and productive debates. Key themes include usability, transparency, data protection, natural language processing, accessibility, sustainability, technical debt, and security requirements.

WER 2024 initially received 48 abstracts. Out of these, 33 were submitted as regular papers; these submissions came from 9 different countries, such as Argentina, Brazil, Colombia, Ecuador, Germany, Italy, Netherlands, Peru, Portugal. After a rigorous review process, each submitted paper was evaluated by a minimum of three program committee members. Finally, 19 articles were selected for publication as full papers, their authors were from different Brazilian states, as well as from Argentina, Ecuador and Italy.

This edition comprises seven tracks, including a Research Track (RT), Industry Track (IT), Master and Doctorate Track (MDT), Software Requirements Tools Track (SRTT), Journal First Track (JFT), and a new Student Poster Track (ST). Additionally, there are three Keynote Speakers: Fabiano Dalplaz from Utrecht University (international speaker), Alejandro Oliveros from the National University of Tres de Febrero (local speaker), and industry speaker Jorge Ceballos. Finally, two tutorials will be offered: "Natural Language Processing for Requirements Management" and "Requirements Elicitation based on Design Thinking."

We would like to express our gratitude to the international committee of the program, which consists of members from various countries, for their contributions to improving the quality of the articles. We also want to thank the authors for their valuable submissions, as well as the track chairs, session chairs, keynote speakers, proceedings chairs, publicity chairs, and tutorial instructors for their hard work. Special thanks to General Chair Graciela Hadad, local organization chairs Leandro Antonelli and Paula Angeleri, and all the members of the time who made the workshop possible. Thanks to the WER Steering Committee, including Graciela Hadad, Jaelson Castro, and Julio Leite, for their continuous efforts in promoting this event and ensuring its quality and advancement. Lastly, we extend our appreciation to the participants for their interest in the Requirements Engineering topics promoted by this workshop.

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Keynotes

Title: Fact or Fake? On Large Language Models in Requirements Engineering Research

Keynote Speaker: Fabiano Dalplaz - Utrecht University (The Netherlands)

Title: Cyber-Physical Systems and Requirements Engineering

Keynote Speaker: Alejandro Oliveros - National University of Tres de Febrero (Argentina)

Title: Abordaje multidimensional para el diseño de requisitos de un Ecosistema Digital de Integrabilidad y su impacto en los requisitos del diseño de software

Keynote Speaker: Jorge Ceballos - University of Belgrano (Argentina)

Journal First Track

PRIUS: Applying Gamification to User Stories Prioritization - In: ACM SIGAPP Applied Computing Review, Volume 23, Issue 4, <https://doi.org/10.1145/3642964.3642967>

Maria Lencastre, Daniel Silva, Jaelson Brelaz Castro, João Henrique C. Pimentel

The Perspective of Brazilian Software Developers on Data Privacy - In: Journal of Systems and Software, Volume 195, Issue 111523, <https://doi.org/10.1016/j.jss.2022.111523>

Mariana Peixoto, Dayse Ferreira, Mateus Cavalcanti, Carla Silva, Jéssyka Vilela, João Araújo, Tony Gorschek

Evaluating a privacy requirements specification method by using a mixed-method approach: results and lessons learned - In: Requirements Engineering, Volume 28, Issue 2, <https://doi.org/10.1007/s00766-022-00388-2>

Mariana Peixoto, Carla Silva, João Araújo, Jéssyka Vilela, Tony Gorschek, Alexandre Vasconcelos

Tutorial

Uso de Natural Language Processing y Machine Learning para la Gestión de Requerimientos

Juliana Delle Ville, Giuliana Maltempo, Roxana Portugal, Leandro Antonelli

Abstract: La ingeniería de requerimientos es una de las etapas más críticas del desarrollo de software. Si bien existen desarrollos bajo métodos ágiles en donde las prácticas de requerimientos son mínimas, aún existen muchos desarrollos tradicionales en donde se invierte mucho esfuerzo en requerimientos. En particular, el lenguaje natural es el instrumento más utilizado, puesto que ayuda a reducir la brecha comunicacional que existe entre los clientes y el equipo de desarrollo. Sin embargo, el lenguaje natural puede originar varios defectos: ambigüedad, vaguedad, etc. En últimos años dos disciplinas de la inteligencia artificial han contribuido con muchas herramientas que han revolucionado el tratamiento de texto: natural language processing y machine learning. Este tutorial tiene por objetivo brindar las herramientas básicas para aplicar en la ingeniería de requerimientos.

Poniendo en práctica PRO-RE-DT, un Proceso de Elicitación de Requisitos Basado en Design Thinking

Ezequiel Kahan, Marcela Genero, Alejandro Oliveros

Abstract: La siguiente es una propuesta de un tutorial en el cual se aborda el rol de la elicitación de requisitos de software, algunos de sus desafíos, y los aportes que el enfoque de Design Thinking puede hacer a los mismos. Se presentará PRO-RE-DT, un proceso de elicitación de requisitos basado en Design Thinking a través de ejemplos y ejercicios prácticos a desarrollar por los participantes.

Accepted Papers

Regular Research Track

1. An approach for Reverse Engineering from Web Applications into the Language of the Domain using the LEL Glossary - Angela Verónica Granizo Rodríguez, Leandro Antonelli, Sergio Firmenich, Diego Firmenich
2. Definición De Una Gramática Para El Léxico Extendido Del Lenguaje - Pablo Roldán Valdiviezo, Leandro Antonelli
3. Evaluación de modelos de procesamiento de lenguaje natural para medir similaridad entre escenarios escritos en español - Gabriela Pérez, Catalina Mostaccio, Leandro Antonelli
4. Multi-Word Entity Extraction And Rich Relationship Identification To Derive Conceptual Models From Natural Language Specifications - Giuliana Maltempo, Juliana Delle Ville, Santiago Ceconato, Federico Pellegrino, Damiano Distante, Leandro Antonelli
5. Analyze of Verbs in Requirements with Natural Language Processing to Enhance Comprehension - Carlos Renato dos Santos, Johnny Cardoso Marques
6. Modelos Visuales durante la Adquisición de Conocimiento: Un Mapeo Sistemático de la Literatura - Alberto Sebastián, Graciela D.S. Hadad, Leandro Antonelli, Carlos Neil
7. Avaliação de Acessibilidade em Aplicações Móveis: Uma Revisão Sistemática da Literatura - Gabriel Girardi da Costa, Vitor Luiz Caldeira Gilnek, Victor Francisco Araya Santander, Marcos Alexandre dos Anjos
8. Catálogo de Requisitos de Sustentabilidade: Um Estudo Preliminar - Abimael Santos, Quelita Ribeiro, Jaelson Castro, Maria Lencastre
9. Alineación de glosarios específicos de dominio - Paola Grijalva-Arriaga, Galo Cornejo-Gómez, Leandro Antonelli, Pablo Thomas

10. Modelagem Conceitual de Dívida Técnica na Engenharia de Requisitos - José F. Guilhermino da Silva, Maria Lencastre, Jaelson Castro
11. Investigando o Processo de Documentação de Requisitos em Sistemas Enterprise Resource Planning (ERP) - Marco Antonio Damo, Victor Francisco Araya Santander
12. Requisitos de Segurança e Privacidade em Startups: Um Estudo Empírico em uma Aplicação de Governança de Dados - Ewerton David Brito de Jesus, Jéssyka Vilela, Carla Silva
13. Desenvolvimento Ágil e Documentação de Requisitos Rumo a Práticas Mais Efetivas: Uma Revisão Sistemática - Luana Souza, Tiago Brito, Marcia Lucena, Apuena Gomes
14. Unveiling Developer Perspectives: A Survey on Accessibility Practices and Requirements in Software Development - Renata Vinadé, Sabrina Marczak
15. Requisitos de Transparência para Engajamento de Desenvolvedores em Portais de Ecossistemas de Software - Thiago de Moura Parracho, Rodrigo Oliveira Zacarias, Henrique Prado de Sá Sousa, Rodrigo Pereira dos Santos
16. Using I* For An Early Analysis Of Interoperability Requirements - Roberto de Cerqueira Figueiredo, Daniela Barreiro Claro, Rita Suzana Pitangueira Maciel, Julio Cesar Sampaio do Prado Leite
17. A Canvas Metamodel to Bridging Agile Project Planning and Requirements Engineering - Ernesto F. Veiga, Taciana N. Kudo, Renato F. Bulcão-Neto"
18. Documentation Artifacts For Conversation-Related Requirements Specification in Chatbots - Larissa Pereira Gonçalves, Geovana Ramos Sousa Silva, Edna Dias Canedo
19. Requirements Documentation Containing Natural Language: A Systematic Tertiary Literature Review - Larissa Pereira Gonçalves, Edna Dias Canedo, Daniel Alves da Silva, Carlos Eduardo Lacerda Veiga, Rafael Timóteo de Sousa Junior, Fábio Lúcio Lopes de Mendonça

Master's and Doctoral Track (WER-MDT)

1. A Requirements Engineering Process for Machine Learning Innovation Projects - Mariana Crisostomo Martins, Taciana Novo Kudo, Renato F. Bulcão-Neto
2. Proceso de Validación de Requerimientos Aplicando Técnicas de Procesamiento de Lenguaje Natural en un Entorno Colaborativo - Sonia Santana, Leandro Antonelli, Pablo Thomas
3. Bart: Uma técnica de Elicitação de Requisitos para Sistemas Multiagentes - Willian Samuel Gerstberger, Gilleanes Thorwald Araujo Guedes

Software Requirements Tools Track (WER-SRTT)

1. Una Herramienta Para Componer Escenarios A Través De Procesamiento Del Lenguaje Natural Y Derivar Casos De Prueba - Gregorio Maclen, Diego Torres, Leandro Antonelli
2. Collab2US: a Tool for Collecting User Stories from Collaborative Boards - Pedro Lucas Dornelles, Rafael Parizi
3. Unlock the Power of the USARP Method: The USARP Tool Contribution to Usability Requirements Elicitation and Specification - Erik B. Silva, Mateus E. Andrade, Ana M. Lima, Anna B. Marques

Industry Track (WER-IT)

1. Do Entendimento à Aplicação: Requisitos de Privacidade e a Visão dos Usuários sobre a LGPD - Ruy Ovídio Perrelli de Melo, Jéssyka Vilela, Carla Silva
2. Habilidades e Competências para um Profissional de Requisitos: uma Visão da Indústria - Cristiana De Paulo, Jarbele C. S. Coutinho, Dorgival Netto
3. Uso de Modelos Conversacionales Avanzados para Evaluar la Ambigüedad en Requerimientos de Software - Pedro E. Colla
4. Implementing Accuracy Quality for Responsible AI in Newsrooms - Roxana L.Q. Portugal, Juliana Delle Ville, Leandro Antonelli
5. Migração da Infraestrutura de TI On-Premise para Multicloud: Desafios no Contexto da Administração Pública Federal no Brasil e da Indústria Farmacêutica - Davi de França Carneiro, Nelson Gutemberg Rocha da Silva, Mauricio Barros Ottoni, Fabiano Alves da Silva
6. La ingeniería de requerimientos en el cumplimiento de la normativa de protección de datos personales - Ma. Carolina Sacoto, Juan Pablo Carvallo
7. Understanding Technical Debts of Requirements in an Industry Project: A Qualitative Study - Rhenara Oliveira, Anna B. Marques, Ismayle Santos, Rossana Andrade

Student's Poster Track

1. Procesamiento de lenguaje natural en la construcción de un modelo léxico - Natalia Mercedes Vidal Monge Navarro
2. Facilitación Gráfica en Modelos de la Ingeniería de Requisitos - Federico Castillo and Martín Romano
3. Integração do ChatGPT para Aprimoramento da Definição de Requisitos de Software: Uma Revisão Sistemática da Literatura - Iohana Salvador Silva and Aêda Monalliza Cunha de Sousa
4. Entre idiomas: Evaluación semántica con sentencias transformers en IR para la obtención de requisitos - Alan Contreras, Brian Albelo and Gabriela Belnava
5. La Ingeniería de Requisitos potenciada por Inteligencia Artificial: Un enfoque para la detección temprana de errores y viabilidad de requisitos no funcionales en el desarrollo de software - Carlos Ezequiel Gonzalez

Availability of Proceedings

The proceedings of WER24 as a book are planned to be published in an open-access repository such as SciELO - Scientific Electronic Library Online, for which an ISBN number was registered. ISBN 978-65-01-06131-3. Additionally, as in all editions of WER, the papers are also be published on the open-access repository <http://wer.inf.puc-rio.br/WERpapers/index.lp>, which carries the ISSN No. 2675-0066. Furthermore, the papers will be reported to the indexing of computer science publications at DBLP.

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