

Second International Workshop on Process-Oriented Data Science for
Healthcare (PODS4H19)

Non Peer-reviewed author version

Munoz-Gama, Jorge; Fernandez-Llatas, Carlos; MARTIN, Niels & Johnson, Owen (2019) Second International Workshop on Process-Oriented Data Science for Healthcare (PODS4H19). In: Di Francescomarino, Chiara; Dijkman, Remco; Zdun, Uwe (Ed.). Business Process Management Workshops BPM 2019 International Workshops, Vienna, Austria, September 1–6, 2019, Revised Selected Papers, p. 453 -457.

Handle: <http://hdl.handle.net/1942/30257>

Second International Workshop on Process-Oriented Data Science for Healthcare (PODS4H19)

Jorge Munoz-Gama¹, Carlos Fernandez-Llatas²,
Niels Martin³, and Owen Johnson⁴

¹ Pontificia Universidad Católica de Chile (Chile) jmun@uc.cl

² Universitat Politècnica de València (Spain) cfllatas@itaca.upv.es

³ Hasselt University (Belgium) niels.martin@uhasselt.be

⁴ University of Leeds (UK) o.a.johnson@leeds.ac.uk

The world's most valuable resource is no longer oil, but data. The ultimate goal of data science techniques is not to collect more data, but to extract knowledge and insights from existing data in various forms. For analyzing and improving processes, event data is the main source of information. In recent years, a new discipline has emerged combining traditional process analysis and data-centric analysis: Process-Oriented Data Science (PODS). The interdisciplinary nature of this new research area has resulted in its application for analyzing processes in different domains such as education, finance, and especially healthcare.

The International Workshop on Process-Oriented Data Science for Healthcare 2019 (PODS4H 2019) aimed at providing a high-quality forum for interdisciplinary researchers and practitioners (both data/process analysts and a medical audience) to exchange research findings and ideas on healthcare process analysis techniques and practices. PODS4H research includes a wide range of topics from process mining techniques adapted for healthcare processes, to practical issues on implementing PODS methodologies in healthcare centers' analysis units. For more information visit pods4h.com

The second edition of the workshop attracted 29 regular paper proposals, a remarkably number of high quality submissions, from which 13 Regular Papers (45% acceptance rate) were selected for presentation. The papers included a wide range of topics: privacy, interactive healthcare process discovery, process-oriented medical education and surgical training, sepsis and breast cancer, outpatient appointments, performance and queues in emergency rooms, returning patient costs, clinical guidelines, simulation, change detection, and standard definitions and codes, among others. The conference also included a number of success cases and a discussion panel.

This edition of the workshop included two awards, the Best Paper Award and the Best Student Paper Award. The PODS4H 2019 Best Paper Award was given to "Towards Privacy-Preserving Process Mining in Healthcare" by Anastasiia Pika, Moe Wynn, Stephanus Budiono, Arthur Ter Hofstede, Wil van der

This is a pre-print of an article published in Lecture Notes in Business Information Processing. The final authenticated version is available online at: <https://link.springer.com/book/10.1007/978-3-030-37453-2>

Aalst, and Hajo A. Reijers. The PODS4H 2019 Best Student Paper Award was given to “Understanding Undesired Procedural Behavior in Surgical Training: the Instructor Perspective” by Victor Galvez, Cesar Meneses, Gonzalo Fagalde, Jorge Munoz-Gama, Marcos Sepúlveda, Ricardo Fuentes, and Rene de la Fuente. The price included a voucher for a professional Process Scientist Training, provided by the Celonis Academic Alliance.

The workshop was an initiative of the Process-Oriented Data Science for Healthcare Alliance. The goal of this international alliance is to promote the research, development, education and understanding of process-oriented data science in healthcare. For more information about the activities and its members visit pods4h.com/alliance

The organizers would like to thank all the Program Committee members for their valuable work in reviewing the papers, and the BPM 2018 organizing committee for supporting this successful event.

Workshop Organizers

Jorge Munoz-Gama	Pontificia Universidad Católica de Chile, Chile
Carlos Fernandez-Llatas	Universitat Politècnica de València, Spain
Niels Martin	Hasselt University, Belgium
Owen Johnson	University of Leeds, UK

Program Committee

Robert Andrews	Queensland University of Technology, Australia
Joos Buijs	Eindhoven University of Technology, the Netherlands
Andrea Burattin	Technical University of Denmark, Denmark
Daniel Capurro	Pontificia Universidad Católica de Chile, Chile
Josep Carmona	Universitat Politècnica de Catalunya, Spain
Claudio Di Ciccio	Vienna University of Economics and Business, Austria
Marco Comuzzi	Ulsan National Institute of Science and Technology, South Korea
Benjamin Dalmas	École des Mines de Saint-Étienne, France
Carlos Fernandez-Llatas	Universitat Politècnica de Valencia, Spain
René de la Fuente	Pontificia Universidad Católica de Chile, Chile
Roberto Gatta	Università Cattolica del Sacro Cuore, Italy
Emmanuel Helm	University of Applied Sciences Upper Austria, Austria
Zhengxing Huang	Zhejiang University, China
Owen Johnson	University of Leeds, UK
Felix Mannhardt	SINTEF, Norway
Ronny Mans	VitalHealth Software, the Netherlands
Niels Martin	Hasselt University, Belgium
Renata Medeiros de Carvalho	Eindhoven University of Technology, the Netherlands
Jorge Munoz-Gama	Pontificia Universidad Católica de Chile, Chile
Ricardo Quintano	Philips Research
David Riaño	Universitat Rovira i Virgili, Italy
Stefanie Rinderle-Ma	University of Vienna, Austria
Eric Rojas	Pontificia Universidad Católica de Chile, Chile
Lucia Sacchi	University of Pavia, Italy
Fernando Seoane	Karolinska Institutet, Sweden
Marcos Sepúlveda	Pontificia Universidad Católica de Chile, Chile
Minseok Song	Pohang University of Science and Technology, South Korea
Emilio Sulis	Università di Torino, Italy
Pieter Toussaint	Norwegian University of Science and Technology, Norway
Vicente Traver	Universitat Politècnica de Valencia, Spain
Wil van der Aalst	RWTH Aachen University, Germany
Rob Vanwersch	Maastricht University Medical Center, the Netherlands
Moe Wynn	Queensland University of Technology, Australia