



EAI-COMPSE 2023

November 16th, 2023 Engineering Graduate Building National Autonomous University of Mexico Raul J. Marsal Hall https://maps.app.goo.gl/rZ1P1odHSFZDfkxSA

Program at a Glance

Thursday, November 16, 2023:

- 08:30 09:00 Registration (Raul J. Marsal Hall)
- 09:00 09:15 Opening Ceremony
- 09:15 10:00 Keynote Session "Hierarchical Decision-Making Problems: Characteristics, Solution Methods and Applications" Prof. Fernando Camacho. School of Engineering and Sciences, Tecnologico de Monterrey, Campus Monterrey, Mexico

10:00 - 10:15 Coffee Break

10:15 – 11:00 Session 1

"An allocation problem considering coverage for COVID-19 testing" "Complex network in earthquakes and aftershocks: the Mexico case" "Service quality in industrial suppliers: a state-of-the-art review"

11:15 - 12:00 Session 2

"Human Activity Parameters for Product Design: Review and First Approach for Quantifying User's Feedback"

"The balance of Redundancy and Efficient in a Resilient Supply Chain" "Digitalization of healthcare supply chain design"

12:15 - 13:00 Session 3

"A multidisciplinary approach to optimizing topology of parts for additive manufacturing"

"Statistical Analysis of Aeronautical Parts Operating in Hazardous Conditions to Propose an Inventory Management. Case: Gulf of Mexico"

"Operational traits of public passenger transport comparison between developed and developing countries"





13:15 – 14:00 Session 4

"Complex networks for cross-sectoral water diagnosis" "Design of a bi-objective optimization model for sustainable production planning applied to textile MSMEs" "Evolution of health care costs in Mexico during the COVID-19 pandemic"

14:00 Coffee Break

14:15 – 16:00 **Lunch**

16:15 - 17:00 Session 5

"Professional skills for the digital transformation of organizations: a literature review"

"Dimensions of NCD in developing countries during working age using Ridge, Lasso, and elastic network regressions"

"Analyzing robustness in Water Distribution Networks using temporal complex networks and optimization"

17:15 – 18:00 Session 6

"A Comparison of Algorithms to Estimate Heart and Respiratory Rate From Face Video Processing"

"Mathematical model for product family design and product sequencing for a pharmaceutical company"

"Decision making with Monte Carlo simulation in medical Offices"

18:15 - 19:00 Session 7

"Performance Evaluation of OECD members' Healthcare Systems using Data Envelopment Analysis"

" Development of Algorithms for Calculations and Design of Electrical Distribution Feeders"

19:00 - 19:15 Coffee Break

- 19:15 19:30 Best Paper Award and Closing Ceremony
- 20:30 Gala Dinner