

Monday, August 25, 2025 (Meeting Room: Atlantic)

07.30-08.00 Conference Registration (Conference Registration Desk)

08.00-08.15 WELCOME
Professor Hiroaki Kikuchi, Meiji University, Japan
Conference Chair

ICR25-Session-1-I **Data Science**
08.20 -10.20, August 25, 2025 (In-person)

Session Chair: Robert Polding
IE University, Spain

08.20-08.40 Implementation of Descriptive Similarity for Estimation Elective Programs of Political Parties
Maryna Averkyna^{1,2}, Peeter Lorents¹, and Maria Khvalko³
¹Management & Organization Department, Estonian Business School, Estonia
²Management Organization Department, Lviv Polytechnic National University, Ukraine
³Department of financial control, Soufflet Agro, Ukraine

08.40-09.00 Machine Learning for Radiation Data Imputation in Vicinity of Nuclear Power Plants
Hsiao Ching Teng, **Shu-Nung Yao**, and Yu Hsiang Wang
National Taipei University, New Taipei 237303, Taiwan

09.00-09.20 K-nearest Neighbour Algorithm Clustering Simple Moving Average the Better Trend Classification Indicator
Justin Hui San Zhao^{1,2,3} and Thair Al-Dala'in^{1,2}
¹Western Sydney University, Sydney City Campus, Australia
²Asia Pacific International College (APIC), Parramatta, Australia
³Lincoln Institute of Higher Education (LIHE), Sydney, Australia

09.20-09.40 Industrial (Open) Data Ecosystems: Technological Infrastructure Challenges
Marija Kuštelega, Larisa Hrustek, and Renata Mekovec
University of Zagreb, Faculty of Organization and Informatics, Varaždin 42000, Croatia

09.40-10.00 Machine Learning in Forensic Age Prediction: A Comparative Analysis of Regression Models and DNA Methylation Biomarkers
Deshao Liu^{1,2,3,4} and Anuradha Samkham Raju⁵
¹School of Computer Data and Mathematical Sciences, Western Sydney University (WSU), Sydney, Australia
²Asia Pacific International College (APIC), Sydney, Australia
³The Institute of International Studies (TIIS), Sydney, Australia
⁴Lincoln Institute of Higher Education (LIHE), Sydney, Australia

⁵Victorian Institute of Technology, Sydney, Australia

10.00-10.20

Leveraging Machine Learning to Predict Liver Disease Status: A Classification Approach

Pavani Minukuri, Yathisha Ganesh, and **Samah Senbel**
Sacred Heart University, Fairfield CT, USA

10.20-10.40

BREAK

ICR25-Session-2-R

Computer and Network Security

10.40-12.20, August 25, 2025 (Remote)

Session Chair:

Elena Kakoulli

Neapolis University Pafos, Pafos, Cyprus

10.40-11.00

Addressing Cybersecurity Challenges in 5G-Enabled IoT Networks: Solutions and Future Directions

João Azevedo¹ and Manuel J.C.S. Reis²

¹Engineering Department, University of Trás-os-Montes e Alto Douro (UTAD), Portugal

²Engineering Department, UTAD & Institute of Electronics and Informatics Engineering of Aveiro (IEETA), Portugal

11.00-11.20

Advancing Security in Healthcare IoT: A Literature Review on MitM Attack Detection and Mitigation Using Machine Learning and Encryption Techniques

Mohamad Abdallah Mohamad and Bassel Soudan

Department of Computer Engineering, University of Sharjah, Sharjah, UAE

11.20-11.40

Backdoor Adversarial Machine Learning Attack on Graph Convolutional Networks for IoMT Traffic Misclassification

Michael Georgiades^{1,4}, Faisal Hussain², and Lakis Christodoulou³

¹ISLab, Computer Science, Neapolis University Pafos, Cyprus

²Department of Computing, National University of Modern Languages, Pakistan

³R&D, Technology, and Innovation, Biomed Medical Systems, Pafos, Cyprus

⁴Infostrada Communications, Paphos, Cyprus

11.40-12.00

Evaluating Model Inversion Attack Success Across Neural Architectures in Federated Learning for Malware Classification

Eman Shalabi¹, Walid Khedr², Ehab Rushdy¹, Asma Musabab Alkalbani³, and **Ahmad Salah**³

¹College of Computers and Informatics, Zagazig University, Zagazig, Egypt

²College of Computer Science and Engineering, Taibah University, Yanbu 966144, Saudi Arabia

³College of Computing and Information Sciences, University of Technology

and Applied Sciences, Ibri, Oman

12.00-12.20

Secure AI-Integrated Classroom Assistant for Intelligent Educational Support

Elena Kakoulli^{1,2}, Salomi Evripidou¹, and Eleftherios Zacharioudakis^{1,2}

¹Intelligent Systems Laboratory, Department of Computer Science, Neapolis University Pafos, Pafos, Cyprus

²Electrical Engineering and Computer Engineering and Informatics, Cyprus University of Technology, Limassol, Cyprus

³National Technical University of Ukraine, Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, Ukraine

12.20-01.20

LUNCH BREAK (ON YOUR OWN)

ICR25-Session-3-I

Computer Science and Computer Engineering Education

01.20-03.00, August 25, 2025, (In-Person)

Session Chair:

Ela Pustulka

The University of Applied Sciences and Arts Northwestern Switzerland
FHNW, Switzerland

01.20-01.40

Feasibility Study on Leveraging Proof Assistants for Educational Purposes

Fernand Dubler, Ulrich Ultes-Nitsche, and Dorian Guyot

University of Fribourg, Fribourg, Switzerland

01.40-02.00

Education vs. Earnings: An Analytical Perspective on Fields of Study and Salaries Using Python

Kirtankumar Patel, Leela Avula, and **Samah Senbel**

Sacred Heart University, Fairfield, CT, USA

02.00-02.20

Enhancing Technical Education for Students and People with Disabilities Through Virtual Reality: A Case Study Using a CNC Device.

Mario Covarrubias¹, Makam Ramachandra Gupta Shashank¹, Nicolás Norambuena², Felipe Muñoz², Cristobal Galleguillos², and Jose Valin²

¹ Politecnico di Milano, Department of Mechanical Engineering, Italy

² Pontificia Universidad Católica de Valparaíso, Chile

02.20-02.40

Key Determinants for Successful Digital Transformation: Insights from Content Analysis and Educational Implications

Ana Kutnjak and Igor Pihir

University of Zagreb Faculty of Organization and Informatics, Pavlinska 2, 42000 Varaždin, Croatia

02.40-03.00

Enhancing SQL Learning with Large Language Models: Generating Translations and Explanations for Educational Use
Samira Moser and **Ela Pustulka**
The University of Applied Sciences and Arts Northwestern Switzerland
FHNW, Switzerland

03.00-03.20

BREAK

03.20-04.20

Keynote Speech:
The Category-Based Approach to Access Control, Obligations and Privacy

Professor Maribel Fernández
King's College London, UK

07.30-09.30

CONFERENCE DINNER