

Tuesday, July 8, 2025

ACR25-Session-5-IR Computational Intelligence & Data Analytics Engineering
08.00-10.20, July 8, 2025 (In-person/Remote)

Session Chair: **Guillermo A. Francia, III**
Center for Cybersecurity, University of West Florida, USA

08.00-08.20 WayOutBench: Evaluating Multimodal LLMs in Interactive Environments
Dimosthenis Margaritis, Dimitris Karidas, Perikles Papadopoulos, and
Helen C. Leligou
University of West Attica, Greece

08.20-08.40 Enhancing Social Media Engagement Sentiment Prediction: A Random
Forest and SMOTE-Based Approach with Explainable AI
Tahsien Al-Quraishi¹, Waseem Alwan Zaboony², Osama A. Mahdi³, Hadi
Naghavipour¹, and Hsham Aburghif⁴
¹Victorian Institute of Technology, Australia
²Wasit University, Iraq
³Melbourne Institute of Technology, Australia
⁴Victorian Institute of Technology, Australia

08.40-09.00 Generative Artificial Intelligence as a Tool to Design the Learning Process
using Active Learning Methodologies
Michele Della Ventura
Accademia Musicale Studio Musica, Italy

09.00-09.20 Understanding GPU Architecture Influences on Low-Precision Deep
Reinforcement Learning Performance
Christopher Hixenbaugh¹, Eugene Chabot², and Alfa Heryudono¹
¹University of Massachusetts Dartmouth, USA
²University of Rhode Island, USA

09.20-09.40 Cyberbullying Text Classification Using Neural Networks, Generative
Models, and Graph Analysis
Ana Laura Lezama-Sánchez¹ and Mireya Tovar Vidal²
¹Escuela de Artes Plasticas y Audiovisuales, Benemerita Universidad
Autonoma de Puebla, Mexico
²Faculty of Computer Science, Benemerita Universidad Autonoma de
Puebla, Mexico

09.40-10.00	<p>Enhancing Parking Efficiency and Environmental Sustainability Using Advanced Object Detection Algorithms</p> <p>Yuan-Ding Hu¹, Ali Hosseinzadeh², F. Frank Chen² and Yen-Kun Lin¹</p> <p>¹National Formosa University, Yunlin, Taiwan</p> <p>²The University of Texas at San Antonio, USA</p>
10.00-10.20	<p>A 3D Convolutional Neural Network for Real Time Car Crash Detection in Road Traffic Videos</p> <p>Yasmine Mnafki¹, Danielle Azar¹, Leonardo Daou^{1,2}, Gregory Zacharewicz², and Jalal Possik³</p> <p>¹Lebanese American University, Lebanon</p> <p>²IMT-Mines Ales, LSR, France</p> <p>³Université Catholique de Lille, France</p>
10.20-10.40	BREAK
10.40-12.00	<p>Panel: Where is Computational Intelligence Heading?</p> <p><i>Moderator:</i> Robert Polding, IE University, Spain</p> <p><i>Panelists:</i> Robert Dietze, Chemnitz University of Technology, Germany</p> <p>Eman El-Sheikh, University of West Florida, USA</p> <p>Antoun Yaacoub, ESIEA, France</p>
12.00-12.20	FREE SLOT
12.20-01.20	LUNCH BREAK (ON YOUR OWN)
01.20-02.40	<p>Keynote Speech: Intent-Based Management for Next-Generation Networks: an LLM-centric Approach</p> <p>Professor Adlen Ksentini</p> <p>Communication Systems Department, EURECOM, France</p>
02.40-03.00	FREE SLOT
03.00-03.20	BREAK

ACR25-Session-6-I Cybersecurity Engineering
03.20-05.00, July 8, 2025 (In-Person)

Session Chair: Eman El-Sheikh

Center for Cybersecurity, University of West Florida, USA

03.20-03.40 Performance of Machine Learning Classifiers for Anomaly Detection in Cyber Security Applications
Markus Haug, Gissel Velarde
IU International University of Applied Science, Erfurt, Germany

03.40-04.00 On the Design and Visualization of Connected Vehicle Security Metrics
Guillermo A. Francia, III and Eman El-Sheikh
Center for Cybersecurity, University of West Florida, USA

04.00-04.20 Designing for Security: A Model for Aged Users' Mobile Banking Applications in South Africa
Rumbidzai Goronga, Adéle Da Veiga, and Hugo Lotriet
School of Computing, University of South Africa, South Africa

04.20-04.40 PFHaD: Page Fault Handler Assisted Defense Against Data-Oriented Attacks
Tianning Zhang¹ and Hao Huang²
¹School of Computer, Jiangsu University of Science and Technology, Zhenjiang, China
²Department of Computer Science and Technology, Nanjing University, Nanjing, China

04.40-05.00 A Robust Speech Encryption Method Using Segmentation and Chaotic Keys for Enhanced Audio Security
Mua'ad Abu-Faraj¹, Abeer Al-Hyari², and Ziad Alqadi³
¹Department of Computer Information Systems, The University of Jordan, Aqaba, 77110, Jordan
²Department of Electrical Engineering, Al-Balqa Applied University, As Salt 19117, Jordan
³Department of Computers & Networks Engineering, Al-Balqa Applied University, Amman 15008, Jordan