The Fourth International Conference on Advances in Computing Research (ACR'26)
Amsterdam, The Netherlands, July 13-15, 2026

Conference Program

Monday, July 13, 2026

07.30-08.00   Conference Registration (Conference Registration Desk)

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

Session-ACR-1   **Computational Intelligence**
08.20-10.20, July 13, 2026 (In-person)

Session Chair: **Helia Farhood**
University of Sydney, Australia

08.20-08.40   Amplifying Farmer Voices with AI: Thematic Analysis for Inclusive
Agricultural Smart Mechanisation
Helia Farhood and Salah Sukkarieh
University of Sydney, Sydney, Australia

08.40-09.00   An AI-Powered Molecular Prediction System for Chemical Synthesis in
Digital Laboratory Workflows
Babatunde Opesemowo, Carl Van der Westhuizen, Reinout Meijboom,
and Wai Sze Leung
University of Johannesburg, Johannesburg, South Africa

09.00-09.20   GameFit: An AI-Powered Gamification for Enhancing User Retention in
Mobile Fitness Applications
Murad Al-Rajab[1], Samia Loucif[2], Muhammet Yalkapov[1], Ayyub Akbar
Ugli Ish-nazarov[1], and Suhail Odeh[3]
[1]College of Engineering, Abu Dhabi University, Abu Dhabi, United Arab
Emirates
[2]College of Technological Innovation, Zayed University, Abu Dhabi,
UAE
[3]Software Engineering Department, Bethlehem University, Bethlehem,
Palestine

09.20-09.40   Deep Learning Models and Their Hybrids with Linguistic Features in
Detecting AI Text
Li-jing Arthur Chang
Jackson State University, Jackson MS 39204, USA

09.40-10.00	Perspectives on the Use of AI-Enabled Smart Therapeutics in Pharmacy: A Study of Pharmacists and Students

Dina Tbaishat[1,2], Omar AlFandi[3], Maha ElFade[1,4], Mays Abu Ajamieh[5], and Nancy Hakooz[5]
[1]Faculty of Educational Sciences, University of Jordan, Amman, Jordan
[2]College of Technological Innovation, Zayed University, Dubai, UAE
[3]College of Technological Innovation, Zayed University, Abu Dhabi, UAE
[4]University of Jordan, Amman, Jordan
[5]School of Pharmacy, University of Jordan, Amman, Jordan

10.00-10.20	Coronary Artery Disease Prediction Using Machine Learning and Ensemble Techniques

Hanan Aljuaid and **Deema Almuqbil**
Department of Computer Science, Princess Nourah bint Abdulrahman University, Riyadh, Saudi Arabia

10.20-10.40	**BREAK**

Session-ACR-2.   **Computational Intelligence**
10.40-12.00, July 13, 2026 (Remote)

Session Chair:	**Dina Tbaishat**
University of Jordan, Amman, Jordan

10.40-11.00	Algorithmic Support for Creative Learning: Assessing a Music Composition Intelligent Tutoring System from a Computer Science Perspective

Michele Della Ventura
Music Academy "Studio Musica", Department of Music Technology, Treviso (Italy)

11.00-11.20	Atrial Fibrillation Detection using Photoplethysmography Signals via Spectrogram-based 2D Convolutional Networks

Sana Sajesh, Heba El-Shimy, and Fadi Alhaddadin
School of Mathematical and Computer Sciences, Heriot-Watt University, Dubai, U.A.E

11.20-11.40	Fuzzy Logic Framework for Modeling Self-Efficacy in Self-Regulated Learning from Likert Scale Data

Ontiretse Ishmael[1,] Etain Kiely[1], John Healy[1], and Cormac Quigley[2]
[1]Department of Computer Science & Applied Physics, Atlantic Technological University, Galway, Ireland
[2]Department of Analytical and Biopharmaceutical Science, Atlantic Technological University, Galway, Ireland

11.40-12.00	Knowledge-Grounded Conversational AI for Scholarship Discovery **Ali M Roumani**[1] and David Liang[2] Computer Science and Information Systems Department, College of Engineering and Applied Sciences, American University of Kuwait, Kuwait
12.00-01.00	**LUNCH BREAK (ON YOUR OWN)**
01.00-02.00	**Keynote Speech: AI and Cybersecurity: Foundations for an AI-Native Resilient Society** **Dr. Takeshi Takahashi** **National Institute of Information and Communications Technology, Japan**
02.00-03.00	**Panel: Current and Future Challenges of Data Science** *Moderator*: **Agon Memeti,** University of Tetova, North Macedonia *Panelists*: **Bjarne Berg**, University of North Carolina-Charlotte, USA **Samia Loucif**, Zayed University, UAE **Vanessa Zorrilla-Muñoz**, Miguel Hernandez University, Spain
03.00-03.20	**BREAK**
Session ACR-3	**Computational Intelligence** **03.20-04.20, July 13, 2026 (Remote)**
Session Chair:	**Babatunde Opesemowo** University of Johannesburg, South Africa
03.20-03.40	Evaluating Arabic Diacritization Models: From Self-Hosted Neural Networks to Cost-Effective Commercial Solutions **Khaldoun Senjab**, Mohammed Lataifeh, and Ashraf Elnagar Department of Computer Science, University of Sharjah, Sharjah, UAE

| 03.40-04.00 | RGB-Fotomics: A Spatially Consistent RGB Image Transformation for Enhanced Single-Cell Omics Classification |
| | Zhengzhong Lu[1], Ahmed Freidoon Fadhil[2,3,4,5], Yang Wang[1], Wentong Wang[1], Songlin Zhang[1], Pengfei Liu[1], Ziyao Wang[1], and **Ali Anaissi**[1,6] |

[1]University of Sydney, Australia
[2]James Cook University, College of Science and Engineering, Brisbane, Australia
[3]Victoria University, Brisbane, Australia
[4]Asia Pacific International College (APIC), Brisbane, Australia
[5]Kaplan Business School (KBS), Brisbane, Australia
[6]University of Technology Sydney, Australia

| 04.00-04.20 | A Hybrid Computational Intelligence Framework for scRNA-seq Imputation: Integrating scRecover and Random Forests |
| | **Ali Anaissi**[1,2], Deshao Liu[3,4,5], Yuanzhe Jia[2], Weidong Huang[1], Widad Alyassine[2] , and Junaid Akram[2] |

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| 07.30-9.30 | **CONFERENCE DINNER** |