

**The 2026 International Conference on Advances in Computing Research (BAI'26)**  
**Tunis, Tunisia, May 4-6, 2026**

**Conference Program**

**Wednesday, May 6, 2026**

**Session BAI-5      AI and the Society + Knowledge Representation + Perceiving**  
**08.00-09.20, May 6, 2026 (In-person)**

Session Chair:      **Amani Lamine**  
ESPRIT School of Engineering, Tunis, Tunisia

**08.00-08.20**      The Flexiformalist Manifesto Made Manifest  
**Dennis Müller**  
Computer Science, Friedrich-Alexander University Erlangen-Nürnberg,  
Germany

**08.20-08.40**      Ethics and EU AI Act in Cases of Work Disability Risk and Alzheimer's  
Disease Risk Prediction  
Sami Andberg<sup>1\*</sup>, Henri Terho<sup>2</sup>, and **Katja Saarela**<sup>2</sup>  
<sup>1</sup>University of Eastern Finland, Joensuu, Finland  
<sup>2</sup>Eficode Group Ltd, Helsinki, Finland

**08.40-09.00**      A Comprehensive Review of Sentiment Analysis Approaches and  
Challenges in Kurdish Social Media Texts  
**Fanar Rofoo**, Shareef M. Shareef, and Polla Fattah  
Salahaddin University-Erbil, Iraq

**09.00-09.20**      NLP Exploration of United Nations Discourse: Trends in Topics and  
Language Patterns from General Debate Speeches  
Abhishek Dhanani, Jaymit Patel, and **Samah Senbel**  
Sacred Heart University, Fairfield CT 06825, USA

**09.20-10.20**      **Keynote Speech: The AI Revolution in Computer Science Education**  
  
**Professor Dr. Nadire Cavus**  
Near East University, Cyprus

**10.20-10.40**      **BREAK**

**Session BAI-6**      **Machine Learning + Cutting Edge AI + Problem Solving**  
**10.40-12.20, May 6, 2026 (Remote)**

**Session Chair:**      **Monther Tarawneh**  
Tafila Technical University, Jordan

**10.40-11.00**      Integrating PDCA and CRISP-DM: A Design Science Framework for Quality Assurance and Control in Data Science Projects  
**Domingos F. Oliveira**<sup>1,2</sup> and Miguel A. Brito<sup>2</sup>  
<sup>1</sup>Departamento de Informática e Computação, Universidade de Mandume Ya Ndemufayo, Lubango, Angola  
<sup>2</sup>Centro Algoritmi, Universidade do Minho, Guimarães, Portugal

**11.00-11.20**      Breast Tumor Classification in DCE-MRI Using Hybrid Feature Extraction Techniques  
**Ali Ibrahim Shamkhi**<sup>1</sup>, Hadeel K. Aljobouri<sup>1</sup>, and Ali Hasan<sup>2</sup>  
<sup>1</sup>College of Engineering, Al-Nahrain University, Baghdad, Iraq  
<sup>2</sup>College of Medicine, Al-Nahrain University, Baghdad, Iraq

**11.20-11.40**      Towards a framework for acetabular fracture and coxarthrosis risk prediction integrating quantum computing, machine learning, and 3D biomechanical modeling  
**Vanessa Zorrilla-Muñoz**<sup>1,2</sup>, Gema Martinez-Navarrete<sup>1,3</sup>, Nicanor Morales-Delgado<sup>3</sup>, Jonatan Garcia-Campos<sup>4</sup>, Ramon Peral-Orts<sup>5</sup>, Peter Valchanov<sup>6</sup>, Alberto Rodriguez-Martinez<sup>7</sup>, Eduardo Fernandez<sup>1,8</sup>, Jose Maria Sabater-Navarro<sup>1,7</sup>, and N. Nicolas Garcia-Aracil<sup>1,7</sup>  
<sup>1</sup>Bioengineering Institute, Miguel Hernandez University, 03202, Elche, Spain  
<sup>2</sup>University Institute on Gender Studies, University Carlos III of Madrid, Getafe, 28903 Madrid, Spain  
<sup>3</sup>Department of Histology and Anatomy. Miguel Hernandez University, 03550, Sant Joan d'Alacant, Spain  
<sup>4</sup>Behavioral of Sciences and Health. Miguel Hernandez University, 03550, Sant Joan d'Alacant, Spain  
<sup>5</sup>Department of Applied Mechanical Engineering, Miguel Hernandez University, 03202, Elche, Spain  
<sup>6</sup>Anatomy and Cell Biology, Medical University of Varna, Varna, Bulgaria  
<sup>7</sup>Department of Systems Engineering and Automation, Miguel Hernandez University, 03202, Elche, Spain  
<sup>8</sup>Networking Research Centre of Bioengineering, Biomaterials and Nanomedicine (CIBER-BBN), Spain

- 11.40-12.00**      The Challenge of Machine Learning in the Study of Autoimmune Diseases in Mexico  
**Ana Laura Lezama-Sánchez**<sup>1,2</sup> and Mireya Tovar Vidal<sup>2</sup>  
<sup>1</sup>Secretaría de Ciencia, Humanidades, Tecnología e Innovación (SECIHTI), Mexico  
<sup>2</sup> Benemérita Universidad Autónoma de Puebla (BUAP), Mexico
- 12.00-12.20**      Federated Learning for Small Language Models: A Cutting-Edge AI Paradigm for Privacy and Efficiency  
Mohammad Naji<sup>1</sup>, Ahmed Freidoon Fadhi<sup>3,4,5,6</sup>, Jawad Khanafer<sup>1</sup>, Alaa Farhat<sup>1</sup>, and **Ali Anaissi**<sup>1,2</sup>  
<sup>1</sup>University of Technology Sydney, Australia  
<sup>2</sup>University of Sydney, Australia  
<sup>3</sup> James Cook University, College of Science and Engineering, Brisbane, Australia  
<sup>4</sup>Victoria University, Brisbane, Australia  
<sup>5</sup>Asia Pacific International College (APIC), Brisbane, Australia  
<sup>6</sup> Kaplan Business School (KBS), Brisbane, Australia
- 12.20-01.40**      **LUNCH BREAK (ON YOUR OWN)**
- 01.40-02.40**      **Panel: Artificial Intelligence and Healthcare: Where are we Heading?**  
*Moderator:*    **Amani Lamine**, ESPRIT School of Engineering, Tunisia  
*Panelists:*    **Robert Polding**, IE University, Spain  
                      **Katja Saarela**, Eficode Group Ltd, Finland  
                      **Ana Laura Lezama Sánchez**, Benemérita Universidad Autónoma de Puebla, Mexico
- 02.20-02.40**      **BREAK**