



International Conferences on Technical Applications of Artificial Intelligence

Agile Methods Association in Corporation with:

1 • AlHussain Bin Talal University-Jordan

(10-12) July. 2025

- 3 Peoples' Friendship University of Russia-Russia
- 2 Biomedical Engineering Research Center-**University of Anbar**

4 • Khawarizmi University Technical College-Jordan

5 • National University College of Technology-Jordan

7 • The Arab Academics and Scientists Union

6 • International Union of Universities





Dr. Hasan A. Al Dabbas Philadelphia University, Jordan **Conference Chair**

Prof. Dr. Mushtak Talib Salih Al-Neda President of University of Anbar, Iraq **Chair Session**



Dr. Sayel M.Fayyad Al Balqa Applied University, Jordan **Conference Co-Chair**

Session for Biomedical Engineering Research Center / University of Anbar Intelligent system Applications with Biomedical Engineering and Artificial limb Manufacturing

Keynote Speaker



Prof. Dr. Emad Kamil Hussein (C.V) Al Furat Al Awsat Technical University, Iraq

Viscoelastic Mechanical Equivalent Models

Joint Scientific Workshop

 Scientific Research and Publication Ethics Artificial Intelligence (AI) and Scientific Research enhancement

Prof. Dr. Yousif Al Mashhadany (C.V)

Director of BERC, University of Anbar, Iraq

Editor in Chief for AJES

Nanomaterial Applications with the Development

of Biosensors and Artificial Limbs

Prof. Dr.Aziz I. Abdulla (C.V **Editor in Chief for TJES** Iraq

Prof. Dr. Takialddin A. Al-Smadi (C.V) Editor in Chief for HEER Iordan

Prof.Dr. Khalaf S Gaeid (C.V) Electrical Engineering Department Tikrit University, Iraq

Synopsis:

Developing the latest generation of artificial intelligence is crucial to increasing productivity, driving innovation, and enhancing the best of everyday life. Researchers, scientists, and engineers intend to achieve this even by improving the latest theories and applications, and it is crucial to disseminate these research papers worldwide to facilitate collaboration and spark innovation. This special issue will bring together the latest and most interesting contributions in the field of artificial intelligence applications in multiple fields in biomedical engineering and in the smart prosthetics industry, and we will be keen to present the best scientific research in these disciplines that are characterized by the applied and modern side of artificial intelligence theories.

















Topics:

Therefore, this special session invites authors to submit high-quality research papers on Intelligent system Applications with Biomedical Engineering and Artificial limb Manufacturing topics which include (but are not limited to) the following:

Artificial Limbs:

- I. Development of intelligent Artificial limbs.
- II. Integration of AI in prosthetic design
- III. Improvement functionality and control in Artificial Limbs..

Biomechanics and Bioengineering:

- I. Application of biomechanics in Artificial limbs.
- II. Biomedical Engineering Principles in the Development of Prosthetics.
- III. Biomaterial in Artificial limbs.
- IV. Lightweight Material in Prosthetics.

Artificial Intelligence in Biomedical Engineering:

- I. AI-powered myoelectric prosthetic.
- II. AI decoders for peripheral nerve interfaces.
- III. Brain-machine interfaces.
- IV. Medical Imaging and Classification.
- V. Health Informatics, and Computational Genomics.
- VI. Deep Learning and Big Data Analytics.

Sensor Technologies:

- I. Biosensors in Artificial limbs.
- II. Sensors for smart prosthetics monitoring.
- III. Development of bio-compatible sensor
- IV. Biosensors for infection detection and prevention.

Osseointegration Techniques:

- I. Osseointegrated prosthetics
- II. Stability Prosthetics and natural movement.
- III. Techniques for Reducing Infection Risks in Artificial Limbs

Robotics in Biomedical Engineering:

- I. Robotic systems in intelligent prosthetics.
- II. Actuators for Natural movement adaptation.
- III. Advances in robotic prosthetic limbs.
- IV. Enhanced mobility.
- V. Robots and Intelligent Systems in Healthcare.
- VI. Robotics and Automation Application.

Material Science in Biomedical Engineering:

- I. Materials for comfortable and efficient prosthetic limbs.
- II. lightweight and durable materials.
- III. Composed Material in Biosensors
- IV. Applied Biosciences and Bioengineering
- V. Nanotechnology and Applied Nanosensors.
- VI. Biophysics and medical physics.





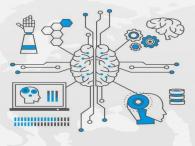






















Neural Interfaces:

- Neural interfaces for Artificial limbs Controller. I.
- II. Cortical neural interfaces in Artificial limbs.
- III. Neural interfaces in Biosensors.

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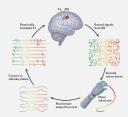
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Rehabilitation Engineering:

- Rehabilitation engineering in the development of prosthetic devices. I.
- Techniques for Improving the Rehabilitation. II.
- III. High performance in the Rehabilitation Process.
- IV. Intelligent tools in the Rehabilitation Process.
- V. Mechatronics and Mechanical tools in Rehabilitation.





Scientific Commit	tee of Conference
Prof. Dr. Yousif Al Mashhadany	12 Assist. Prof. Dr. Sayel M.Fayyad
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Important Information:

ICTAAI 2025 CONFERENCE

All accepted papers will be Published in a Special issue Which is Indexed in Scopus data baseJournals (Upon Researcher Request).

For more details, please visit the conference website: https://amavte.com/ictaai



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No	Participation Type	Fees
1	Standard Participation without hotel accommodation	450 \$
2	Standard Participation with accommodation for 2 nights at Petra Elite Hotel	550 \$
3	Standard Participation without accommodation with publication in Conference proceeding	450 \$
4	Standard Participation with accommodation for 2 nights +Publication Q3+Q4 Scopus journal (Full Package without Flights)	1150 \$
5	Students (Ph.D. + Master)	200 \$
6	Standard Participation from Jordan without accommodation	280 \$
7	Attendance only	200 \$
8	Online Conference Participation	200 \$
9	Posters	70 \$

Fees Include:

- **Conference documents + Conference Bag.**
- Two Coffee Breaks / for 2 days.
- Two Lunches / for 2 days.
- Transportation from Amman to Petra.

ournals for Publication:

Publication Fees: 400\$

Publication Fees: 200\$

Social Program.

Important Dates:

- Abstract Submission: July 5, 2025
- Full Paper Submission Deadline: June 20, 2025
- Notification of Acceptance: July 01, 2025
- Camera-Ready Submission: July 05, 2025
- Early Bird Registration: March 30, 2025
- Conference Date: July (10-12), 2025
- Venue: Petra Elite Hotel



- Publication Fees: 290\$
- For more details, please visit the journal's scopus website: https://www.scopus.com/sourceid/21101067520
- 4. Anbar Journal of Engineering Sciences (AJES)
 - **Publication Fees: Free**
 - For more details, please visit the journal's website: https://ajes.uoanbar.edu.ig













