



**Sixth Iranian Conference on Advances in Enterprise Architecture, 16-17
Nov. 2022**

**Conference motto: Synergy of Enterprise Architecture and
Artificial Intelligence, Shahid Beheshti University, Tehran, Iran**



Conference Chairs:

Honorary President: Prof. Sadollah Nasiri Gheidari
Chairman of the conference: Prof. Mohsen Ebrahimi Moghaddam

Conference Secretary:

Prof. Feriedoon Shams Aliee, Shahid Beheshti University

Conference Scientific Committee:

Eslam Nazemi, Shahid Beheshti University (Committee
Secretary)

Officials of scientific axes:

❖ Raouf Khayami, Shiraz University of Technology (Enterprise
Architecture, Frameworks, Methodologies, and Reference
Models)

❖ Mohsen Ebrahimi Moghadam, Shahid Beheshti University
(Enterprise Architecture and Artificial Intelligence)

❖ Bahar Farahani, Shahid Beheshti University (Digital
Transformation and Smart Technologies)

❖ Morteza Amini, Sharif University of Technology (Security in
Enterprise Architecture)

❖ Hassan Haghighi, Shahid Beheshti University (Service
Engineering)

❖ Mahmoud Neshati, Shahid Beheshti University (Data
Management, Business Intelligence Application and Data
Mining)

❖ Ali Bozorgi-Amiri University of Tehran (Enterprise
Engineering and Business Processes)

Conference Executive Committee:

Dr. Maedeh Mosharraf (Secretariat)

Dr. Bahar Farahani (Workshop)

Dr. Hassan Haghighi (Industry Communication)

Dr. Sadegh Ali Akbari (Publications)

Dr. Seyed Raouf Khayami (Graduate Students Meeting)

Dr. Maedeh Musharraf (Conference Website)

Important dates:

Deadline for submitting: ~~5 Sep 2022~~ 22 Sep 2022

Announcement of acceptance: 22 Oct 2022

Deadline for registration and final submission: 11 Dec 2022

Exhibition Booth application deadline: 5 Oct 2022

Registration in the Exhibition booth: 7 Oct 2022

Conference Secretariat Address:

Faculty of Engineering and Computer Science, 2nd Floor,
Shahid Beheshti University, Daneshjoo Blvd., Velenjak,
Tehran

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<http://icaea.ir/2022/>

Shahid Beheshti University is holding the sixth Iranian conference on advances in Enterprise Architecture with the aim of growing and developing the knowledge of Enterprise Architecture and its applications in the country. The emphasis of this conference is on the fundamental, practical, strategic and developmental aspects of Enterprise Architecture that can bring significant benefits to Iranian stakeholders. All researchers, academics and experts in this field from all of the world are invited to submit articles and participate in the conference by exchanging their research and applied findings to make the conference more productive and effective in line with the objectives of the conference.

• **Scientific and practical aspects of the conference:**

• **Enterprise Architecture, frameworks, methodologies, and reference models**

- Information systems and software Architecture
- Data, infrastructure, manpower Architecture and information technology management
- Modeling methods in Enterprise Architecture
- Enterprise Architecture reference model
- Reference frameworks and models specific to industry and the private sector
- Customized reference frameworks and models
- Methodologies and evaluation of Enterprise Architecture
- Techniques and patterns of design and development of Enterprise Architecture
- Maturity and dominance of Enterprise Architecture
- Enterprise Architecture tools and standards
- Strategies and new approaches to Enterprise Architecture
- Key performance indicators and performance measurement models in Enterprise Architecture
- Agile Enterprise Architecture
- Interactive attitude in Enterprise Architecture
- Management and digital Enterprise Architecture plans
- Propulsion of Enterprise Architecture
- Decision making based on Enterprise Architecture analysis
- Theories of Enterprise modeling, human aspects in Enterprise modeling
- Social, economic and cultural aspects of Enterprise Architecture
- Systemic thinking and its role in improving Enterprise Architecture
- Functions of different schools and theories of Enterprise Architecture
- Architecture of small and medium Enterprises

• **Digital transformation and smart technologies**

- Digital transformation of business
- Virtual Enterprise
- The Fourth Industrial Revolution
- Agile Enterprise
- Blockchain in Enterprise Architecture
- The Internet of Things in Enterprise Architecture
- Big data, cloud computing / edge computing

Papers must be prepared and submitted in Persian or English and represent new work and have not previously been published in the proceedings of other conferences or in journals. Simultaneous submission of an article to other conferences and journals is not permitted and will result in rejection of the article (at any stage specified). It is necessary to submit papers in the format (PDF maximum 6 pages) and its abstract in the format (Word one page) according to the pagination format available on the conference site, only electronically and through the conference site. For each accepted paper, at least one of the authors must register regularly and present the paper at the conference. Also, after the conference, selected papers will be considered for publication in a special issue of the Journal of Innovations in Computer Science and Engineering.

- Sovereign federated data space, Data sharing, data monetization, data marketplace
- Leaders of innovation and acceptance of new technologies
- Intelligence, digital economy, digital architecture
- Virtual reality in the development of digital transformation
- 5G / 6G technology as a catalyst for digital transformation
- Gamification and its application in the Enterprise
- Web 3 and Non-fungible token (NFT)
- **Service engineering**
 - Service-based integration and interoperability
 - Service orientation and Enterprise architecture
 - Service-oriented Enterprise architecture (SOEA)
 - Adaptability of services
 - Design and implementation of services
 - Continuous improvement of service
 - System of systems and large-scale systems
 - Micro services
 - Tools and models of service development maturity
 - DevOps
 - Analysis of enterprise services
 - Models and methods of developing enterprise services
 - Tools for developing enterprise services
 - Imitation and simulation of enterprise services
- **Enterprise data management, business intelligence and data mining**
 - Communication of big data inside and outside the Enterprise
 - Balanced scorecard and Enterprise management dashboards
 - The relationship of information and data architecture with the management dashboard
 - Governance and leadership in data-driven Enterprises
 - The use of semantic web and business intelligence in the Enterprise
 - Agile actions of Enterprises in utilizing business intelligence
 - Management and architecture of business intelligence systems dashboard
 - Applied data mining
 - Enterprise decision support systems
 - Recommender systems for Enterprise architecture
- **Enterprise engineering and business processes**
 - Information technology alignment with the Enterprise's business
 - Engineering and knowledge management and ontology of the Enterprise
 - Modeling and managing business processes
 - Self-adaptation of business processes and risk management of the Enterprise
 - Augmented reality and business process management
 - Managing business processes in customer service
 - Automation of business processes
 - Engineering and digital management of organizational knowledge
 - Analysis of business processes and business models
 - Enterprise engineering and architectural thinking
 - Application of artificial intelligence in business process management
 - Skills and capabilities of human resources in Enterprise Architecture
- **Security in enterprise architecture**
 - Security of enterprise services
 - Security concerns of the Enterprise's Architects
 - Application of DevSecOps in Enterprise Architecture
 - New frameworks for information security of the Enterprise
 - Organizational security vulnerabilities (infrastructure, technical, process)

- Attack response systems with an approach to protecting business processes
- Awareness and management of security incidents in Enterprise and Enterprise Architecture
- Design and deployment of Security Operations Centers (SOCs) with an approach to detecting attacks on the business processes
- Security of communication equipment and infrastructure
- Criminology of abnormal behaviors in the Enterprise
- Audit and analyze security risks
- Data privacy in the Enterprise
- **Enterprise Architecture and Artificial Intelligence**
 - Artificial intelligence technology in Enterprise architecture
 - Application of artificial intelligence in business process management
 - Services based on artificial intelligence in the enterprise (chat bots, image / voice recognition in Enterprises, etc.)
 - Smart business technologies
 - Artificial intelligence technology in enterprises
 - Development of reference models in artificial intelligence
 - Cognitive enterprise architecture, cognitive enterprise and the fifth industrial revolution
 - Human-machine participation
 - The use of artificial intelligence to facilitate and increase the efficiency of enterprise architecture
 - Identify the component / capability associated with the change in the business / Enterprise
 - Evaluate the effect of introducing artificial intelligence solution in the relevant environment
 - Planning to implement an artificial intelligence solution
 - Implement and manage the implementation of artificial intelligence solution Review feedback and improve artificial intelligence solutions in the Enterprise / business
 - Intelligent business using machine learning algorithms
 - Machine learning-based process exploration
 - Process mining based on the frequency of modification of enterprise architecture models
 - Smart advisors to create and modify enterprise architecture models
 - AIOps
 - Intelligence-based decision making in the Enterprise
 - Using intelligent methods of collecting and analyzing information in the Enterprise
 - Intelligent information architecture processing (problem analysis and identification)
 - MLOps
 - Ways to improve the intelligence of the Enterprise using Industry 4 technologies
 - Machine process of enterprise architecture models
 - Assessing the level of intelligence of enterprise architecture models
 - Investigate the maturity of enterprise architecture using intelligent algorithms
 - Investigate and control the shortcomings of architectural models using machine learning algorithms
 - Intelligent ontology extraction in accordance with the enterprise architecture framework Ontology and its application enterprise architecture / Business
 - Creating a basic ontology for enterprise architecture models
 - Ontology based on ontology-based enterprise models
 - Intelligent navigation of enterprise architecture models based on ontology
 - Use of ontology algorithms to infer status from data of Enterprise architecture model
 - Intelligence, digital economy, digital architecture and agility in the enterprise