

ICAICTSEE 2023 Program

December 13 & 15, 2023



VIT

Vellore Institute of Technology
(Deemed to be University) under section 3 of UGC Act, 1956



University of National & World Economy (UNWE)
Sofia, Bulgaria

School of Electronics Engineering, Vellore Institute of Technology
Vellore, India

Invites you to

International Conference on Application of Information and Communication Technology and Statistics in Economy and Education

ICAICTSEE 2023

Virtual Conference on

**RECENT TRENDS IN
BIOMEDICAL TECHNOLOGY**

December 13, 2023 MS Teams

Submission Through:

submission.icaictsee23@vit.ac.in

Early Bird Registration:

December 06, 2023

Important Dates:

Submission of Abstract/Full Paper: Dec 01, 2023

Acceptance Notification: Dec 05, 2023

Submission of Camera Ready Paper: Jan 01, 2023

ICAICTSEE 2023 Conference: Dec 13, 2023

Queries:

enquiry.icaictsee@vit.ac.in



Indexed by





THE UNIVERSITY OF NATIONAL AND WORLD ECONOMY (UNWE), SOFIA, BULGARIA

- is the largest and the eldest higher economic school in Bulgaria and Southeastern Europe. It has a history of 103 years.
- The University originates from the Free University of Political and Economic Sciences established by Order No.2155 of July, 5th, 1920 of the Minister of National Enlightenment. In 1940 /State Gazette, iss. No.126 of June, 7th, 1940/ it was transformed into State Higher Institute of Finance and Administrative Sciences and in 1947 it was reorganized as a Faculty of Economic and Social Studies at Sofia University.
- The autonomy of the University was restored under the name Higher Institute of Economics by Decree No.26 /"Messages", iss. No.10 of February, 1st, 1952/. In 1953 it was named after Karl Marx by Decree No.89 /" Messages", iss. No. 23 of March, 20th, 1953/.
- On April, 27th, 1990 the Academic Council made the decision to reorganize Karl Marx Higher Institute of Economics as a University of National and World Economy. It was officially done by Decision of the National Assembly for establishment and transformation of higher educational schools /State Gazette, iss. No.68 of July, 7th, 1995/.



VIT®

Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

VELLORE INSTITUTE OF TECHNOLOGY (VIT), INDIA:

- Ranked among the top 601-700 Universities of the world and one among the top 3 Institutions in India (Shanghai ARWU Ranking 2022)
- the 9th best University, the 10th best research institution and the 12th best engineering institution in India (NIRF Ranking, Govt. of India 2022)
- Engineering and Technology subject areas of VIT are the 346th best in the World and the 9th best in India as per QS World University Rankings by Subject 2022
- NAAC Accreditation with A++ grade in the 4th cycle
- Ranked within the top 200 Universities in Asia (QS - Asia University Rankings 2022)

Conference Committees

Conference chair

Dimiter G. Velev	University of National and World Economy	Bulgaria
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Virtual Conference Organizer

Dr. Sivakumar R	School of Electronics Engineering, Vellore Institute of Technology (VIT)	India
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S Vidhya	Vellore Institute of Technology	India
N Sharmila	Vellore Institute of Technology	India

December 13th, 2023

11:00, Sofia, BG (UTC+2)

Welcome Remarks:

- **Assoc. Prof. D.Sc. Michael Musov, Vice-Rector for Research and International Affairs, UNWE, Bulgaria**
- **Dr. Sivanantham S, Dean, School of Electronics Engineering, VIT, India**

Panel I

CHAIRS: Prof. VIDHYA. S and Prof. MYTHILI. A (VIT) & Prof. DIMITER VELEV (UNWE)

Presentation length: 10 minutes, including 3 minutes for Q&A

PAPER	TITLE
VIT - 01	ECG signal processing and Heart Rate Variability Analysis Using LabVIEW Lohitaa J, Sivakumar R Vellore Institute of Technology, Vellore, Tamil Nadu, India
VIT - 02	Smart Gait Analysis Framework for Strengthening Rural Healthcare Arshya Loomba, Sivakumar R Vellore Institute of Technology, Vellore, Tamil Nadu, India
VIT - 03	Smart Bio-Shirt: Wearable Health Monitor for Active Living Shubhankar S, Sivakumar R Vellore Institute of Technology, Vellore, Tamil Nadu, India
VIT - 04	Analysis of the Ultrasound signal using Hilbert Transform Sakthivel J, Sivakumar R Vellore Institute of Technology, Vellore, Tamil Nadu, India
VIT - 05	Wearable tremor absorbing device for the Parkinson's Disease patients Praviene P, Sivakumar R Vellore Institute of Technology, Vellore, Tamil Nadu, India
VIT - 06	Piezoelectric Nanogenerator based Smart watch. Guhan C, Sivakumar R Vellore Institute of Technology, Vellore, Tamil Nadu, India
VIT - 07	Stroke Gait Analysis using IMU Sensors Gaadha Jeevan, Sivakumar R Vellore Institute of Technology, Vellore, Tamil Nadu, India
VIT - 08	Identification of Idiopathic Toe Walking Patients through Machine Learning Maanasa Mahadevan, Pragadeesh Murugan, Sivakumar R Vellore Institute of Technology, Vellore, Tamil Nadu, India
VIT - 09	Characterization of Respiratory Conditions Using LabVIEW Yuvapriya E, Sivakumar R Vellore Institute of Technology, Vellore, Tamil Nadu, India

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13:00, Sofia, BG (UTC+2)

Panel II

CHAIRS: Prof. SHARMILA. N and Prof. JEEVA. J B (VIT) & Prof. DIMITER VELEV (UNWE)

Presentation length: 10 minutes, including 3 minutes for Q&A

PAPER	TITLE
VIT - 10	Machine Learning-Enhanced Gait Analysis Using IMU Sensors for Parkinson's Shraddha Panwar, Sivakumar R Vellore Institute of Technology, Vellore, Tamil Nadu, India
VIT - 11	Wireless EMG Monitoring System for Muscle Activity Detection and Analysis in Parkinson's Disease R Sivakumar, Shreya Paul Vellore Institute of Technology, Vellore, Tamil Nadu, India
VIT - 12	Non-Invasive Oral Cancer Detection: Leveraging Salivary Biomarkers with Machine Learning Sivakumar R, Bhavesh Hemwani Vellore Institute of Technology, Vellore, Tamil Nadu, India
VIT - 13	Wearable Technology in Healthcare Monitoring Challa Revanth Kumar, Sivakumar R Vellore Institute of Technology, Vellore, Tamil Nadu, India
VIT - 14	Development of CNT/PDMS-based dry ECG electrodes Lingadharini P, Sivakumar R Vellore Institute of Technology, Vellore, Tamil Nadu, India
VIT - 15	LabVIEW-Based EEG Signal Analysis for the Identification and Characterization of Aberrant Brain Activity Patterns in Neurological Disorders Saran Arvinda Chandrasekar, Sivakumar R Vellore Institute of Technology, Vellore, Tamil Nadu, India
VIT - 16	LabVIEW's Cutting-Edge Technology in Cardiac Disease Monitoring Chandhini Jeyashanker, Sivakumar R Vellore Institute of Technology, Vellore, Tamil Nadu, India
VIT - 17	Analysis of human thought using EEG signals and LabVIEW Purbita Nag, Sivakumar R Vellore Institute of Technology, Vellore, Tamil Nadu, India
VIT - 18	Smart Bandage for the Continuous Monitoring of Wound using LabVIEW Sakthivel k, Sivakumar R Vellore Institute of Technology, Vellore, Tamil Nadu, India
VIT – 19	A Comprehensive Review Wearable Sensor Technology Janaane R,Nithiyaishwarya A R, Preethika S, Shweta N, Sivakumar R Vellore Institute of Technology, Vellore, Tamil Nadu, India

December 15th, 2023

10:00, Sofia, BG (UTC+2)

Panel III

CHAIRS: Prof. Sergei Ohrimenko & Prof. DIMITER VELEV (UNWE)

Presentation length: 10 minutes, including 3 minutes for Q&A

PAPER	TITLE
FA - 01	New Forms and Features of Cyber Confrontations Serghei Ohrimenco¹, Valeriu Cernei² ¹ Academy of Economic Studies of Moldova, Chisinau, Moldova ² Partner, IT Audit & Advisory BSD Management SRL, Chisinau, Moldova
FA - 02	Open and E-Learning: Strengths and Weaknesses Natalia Bolgari, Ina Andoni Academy of Economic Studies of Moldova, Chisinau, Moldova
FA - 03	Crowdfunding as an alternative source of investments in the conditions of economic digitalization: relevance of use in the Republic of Moldova Irina Dorogaia ¹, Alexandr Scutari ² ¹ Academy of Economic Studies of Moldova, Chisinau, Moldova ² BALCANICA SRL, Chisinau, Moldova
FA - 04	Cultural profile of the internet user in the Republic of Moldova Angela Pirlog Academy of Economic Studies of Moldova, Chisinau, Moldova
FA - 05	A combination of investments in renewable energy and heat pumps in the private sector Lesan Timur Academy of Economic Studies of Moldova, Chisinau, Moldova
FA - 06	Application of Agile philosophy as a necessity of modern business environment Anastasia Chirita Academy of Economic Studies of Moldova, Chisinau, Moldova
FA - 07	Incidence of fake news shared on social networks and risk assumed by university students Carlos A. Torres-Gastelú¹, Joel Angulo-Armenta² ¹ Universidad Veracruzana, Veracruz, Mexico ² Instituto Tecnológico de Sonora, Sonora, Mexico
FA - 08	Navigating the Digital Frontier: Enhancing Operational Risk Management in the Era of Digitalization Caminschi Olga Academy of Economic Studies of Moldova, Chisinau, Moldova

December 15th, 2023

13:0, Sofia, BG (UTC+2)

Panel IV

CHAIR: Prof. DIMITER VELEV (UNWE)

Presentation length: 10 minutes, including 3 minutes for Q&A

PAPER	TITLE
BA - 01	The Role of Data Management and Open Science in Collaborative Research Plamen Milev University of National and World Economy, Sofia, Bulgaria
BA - 02	Application of digital tools in the educational process Katya Kirilova University of National and World Economy, Sofia, Bulgaria
BA - 03	Capital structure of the enterprise /methodology and methodology for analysis in digitalization conditions/ Rositza Ivanova University of National and World Economy, Sofia, Bulgaria
BA - 04	Specific Features of the Accounting of Insurers Expenses Maia Nachkova University of National and World Economy, Sofia, Bulgaria
BA - 05	Modern techniques and tools for generating SQL queries Veska Mihova, Maria Marzovanova University of National and World Economy, Sofia, Bulgaria
BA - 06	Using Code Generation in LLMs for Automatic Execution of Data Science Tasks Venko Andonov University of National and World Economy, Sofia, Bulgaria
BA - 07	RAG Strategies for a Hallucination-Free University Admission AI Assistant Venko Andonov University of National and World Economy, Sofia, Bulgaria
BA - 08	Challenges for auditors in relation to disclosure of sustainability information in financial statements Iavor Bachev University of National and World Economy, Sofia, Bulgaria
BA - 09	The Cash of the Big Bulgarian Companies: What Do Their Cash Flow Statements Show and What Do Not? Fanya Filipova, Teodora Zapryanova, Atanas Atanasov, Romyana Marinova University of Economics, Varna, Bulgaria

December 15th, 2023

16:0, Sofia, BG (UTC+2)

Panel V

CHAIR: Prof. DIMITER VELEV (UNWE)

Presentation length: 10 minutes, including 3 minutes for Q&A

PAPER	TITLE
BA - 10	Spectral Analysis the Wave Signal of Electronic Sphygmomanometer Lubomir Lahtchev Institute of Robotics, Bulgarian Academy of Sciences
BA - 11	Project CSFSFS – Programming from Students for Students Svetlana Vasileva, Ilko Iliev, Slavina Tsoneva NMHS, Dobrich, Bulgaria
BA - 12	The Entrepreneurial Paradigm in Higher Educational Service: Thinking in a Design for Doing in a Prototype Vanya Slantcheva Management, Trade and Marketing College, Sofia, Bulgaria
BA - 13	SWOT analysis of endpoint protection systems and their applicability in higher education Gabriela Naskova University of National and World Economy, Sofia, Bulgaria
BA - 14	The role of artificial intelligence in endpoint protection systems Gabriela Naskova University of National and World Economy, Sofia, Bulgaria
BA - 15	Features and Challenges of Natural Language Processing in the Modern Digital World Yavor Tabov University of National and World Economy, Sofia, Bulgaria
BA - 16	Analysis on the Applications of Retrieval Augmented Generation (RAG) Architecture Bozhidar Bahov University of National and World Economy, Sofia, Bulgaria
BA - 17	Unlocking and exploring the power of unstructured Big Data using Pentaho Business Analytics Mariana Kovacheva University of National and World Economy, Sofia, Bulgaria