ITECX'25

The Fibonacci International Conference on Engineering, Technology, and Mathematics

ITECX'25

Fibonacci

GAZIANTEP UNIVERSITY 1973

UNIVERSITÀ TELEMATICA INTERNAZIONALE UNINETTUNO

T.C. İSTANBUL ÜNİVERSİTESİ 1453

November 21st-25th, 2025, Rome, Italy

Theme

The First Fibonacci International Conference on Engineering, Technology, and Mathematics (ITECX'25), to be held in Rome, Italy, will celebrate the convergence of cutting-edge research across multiple disciplines. This conference aims to foster interdisciplinary collaboration by bringing together scholars, industry experts, and practitioners from engineering, technology, and mathematics. The event will highlight the critical role of these interconnected fields in addressing global challenges through innovative solutions. What sets ITECX'25 apart is its emphasis on integrating diverse methodologies and perspectives, creating a platform where mathematical theories fuel technological innovations, and engineering advances drive real-world applications. By uniting thought leaders from a broad spectrum of disciplines, we aim to inspire highquality contributions that push the boundaries of knowledge, promote sustainable development, and encourage cross-border collaboration. Rome, with its rich history of mathematical and scientific excellence, provides the perfect backdrop for this pioneering conference series, ensuring a unique and inspiring environment for participants.

List of Conference Topics

Mathematics and its Applications

- Applied and Computational Mathematics
- Mathematical Modeling in Engineering and Technology
- Optimization Algorithms and Techniques
- Discrete Mathematics and Combinatorics
- Data Science and Statistical Analysis
- Differential Equations and Dynamical Systems
- Probability Theory and Stochastic Processes
- Cryptography and Information Security

Engineering Innovations

- Mechanical and Structural Engineering
- Civil and Environmental Engineering Solutions
- Advanced Manufacturing and Industrial Engineering
- Engineering for Sustainable Development
- Robotics and Automation
- Electrical and Electronics Engineering
- Energy Systems and Smart Grids
- Aerospace and Transportation Engineering

Technology and Digital Transformation

- Artificial Intelligence and Machine Learning Applications
- Big Data Analytics and Cloud Computing
- Internet of Things (IoT) and Smart Cities
- Cybersecurity and Blockchain Technologies
- Digital Twins and Virtual Simulations
- Quantum Computing and Emerging Technologies
- Biotechnology and Bioinformatics
- 5G Networks and Future Communication Systems

Interdisciplinary Themes

- Engineering and Technology in Healthcare
- Mathematical Approaches to Sustainability
- AI and Machine Learning in Engineering Systems
- Technology-driven Solutions for Climate Change
- Cross-disciplinary Approaches to Smart Infrastructure
- Innovative Educational Technologies in Science, Engineering, Technology, and Mathematics (STEM)
- Mathematics in Materials Science and Nanotechnology
- Multi-scale Modeling in Engineering and Technology

Special Issues

Selected papers from ITECX'25 will have the opportunity to be published in special issues of the following prestigious journals, subject to their peer-review process:

- Journal of Transportation and Logistics

- The Journal of Operations Research, Statistics, Econometrics and Management Information Systems

- Journal of Information Analytics

PROGRAM COMMITTEES

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Assoc. Prof. Dr. Süleyman METE
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Research Assistant Zeynep Yüksel
Gaziantep Islam Science and Technology University, TÜRKİYE

INVITED SPEAKERS

Prof. Dr. Anett Wolgast

FHM University

Short-Bio:

Prof. Dr. habil. Anett Wolgast is a professor of psychology with a focus on educational psychology, statistics, and research methods at the University of Applied Sciences FHM, Campus Hanover, Germany. She has published extensively in applied research that draws on classical test theory and item response theory, often within interdisciplinary collaborations. Her work integrates innovative technological tools in higher education and lifelong learning. Examples include research on simulating student behavior in a virtual classroom environment, developing virtual training programs, and leading a current research network that investigates the role of emerging technologies, education, and technology acceptance in addressing health, behavioral, and environment-related challenges. Specifically, her current research encompasses social perspective-taking and cooperation in educational contexts, including sustainable strategies for adaptation to climate change, emotion regulation, and dealing with antisocial behavior.

INVITED SPEAKERS

Prof. Dr. Euripides Hatzikraniotis

Aristotle University of Thessaloniki

Short-Bio:

Euripides Hatzikraniotis is a retired Professor in the fields of "Electronic Properties of Semiconductors & Semiconductor Devices" and "Didactics of Physics" at the School of Physics, Aristotle University of Thessaloniki (AUTH) – Greece. He was the Director of the Program of Post-Graduate studies on Didactics of Physics and Educational Technology, and the Director of the Laboratory of Science Education and Educational Technology. His research interests cover the development & evaluation of Teaching-Learning Sequences in STEM, Nano-Technology, Inquiry-based Learning and Experimentation with digital media & mobile devices. He has supervised 23 Doctoral dissertations, 23 Master's theses, and 10 undergraduate theses. He has participated in about 30 research projects as coordinator or principal investigator. He has 20 contributions in book-chapters, more than 240 publications in international journals & conferences and about 2300 references to his work (h-index:23, i10-index:51).

INVITED SPEAKERS

Assoc. Prof. Dr. Ovidiu Ivancu

Vilnius University

Short-Bio:

Ovidiu Ivancu is currently an Associate Professor at Vilnius University, Faculty of Philology. He teaches Romanian Language and Culture, English for Academic Purposes and Research, and World Literature within the Faculty of Philology and the Institute of Political Science and International Relations.

He holds a PhD in Philology from the University of Alba Iulia, Romania, Faculty of History and Philology. His doctoral dissertation, Cultural Identity and the Collective Romanian Mentality in Post-Communism: Images, Myths, Perceptions, Repositions (published in 2013), explores issues of identity and cultural representation in post-communist Romania.

Between 2009 and 2013, Dr. Ivancu served as a Visiting Lecturer at Delhi University, India, where he taught Romanian Language and Literature. In 2017–2018, he was a Visiting Lecturer at the State University of Comrat, Republic of Moldova.

His main research interests include imagology, the theory of mentalities, literary theory, literary criticism, and the history of literature.

INVITED SPEAKERS

Dr. Julija Grigorjevaitė

Vilnius University

Short-Bio:

Dr. Julija Grigorjevaitė is the head of the Didactic Centre and Assistant Professor of the Faculty of Chemistry and Geosciences of Vilnius University (Lithuania). Additionally, Julija is a chemistry teacher at the Business and Hospitality Training Centre and head of the Non-formal School of Young Chemists 'Pažinimas' (Exploring Chemistry), a program dedicated to engaging young students with practical chemistry. Her extensive teaching career spans six years, encompassing current roles at both the university and high school levels, where she teaches students. Her lectureship encompasses essential courses such as analytical chemistry laboratory work, general chemistry, and chemistry didactics. She holds a lead role in the educational research project, "Unveiling Chemistry Didactics: Exploring Research for Efficient Teaching," which focuses on exploring research for efficient teaching. Her work focuses on training high school chemistry teachers to transition their labs from traditional "cookbook" procedures to inquiry-based practicals. This methodological shift directly enhances student engagement and deepens their understanding of scientific concepts, leading to improved performance. Through roles at the Didactic Centre and as a project lead, she equips teachers with the tools and confidence to design educational research-based activities, ensuring their instruction is optimised for efficient teaching and maximising student learning outcomes.

INVITED SPEAKERS

Prof. Dr. Carina Gonzalez

University of La Laguna

Short-Bio:

Carina González is a Full Professor of Computer Architecture Technology at the University of La Laguna (Spain), teaching across engineering, education, arts, and social sciences. She holds dual PhDs in Computer Science and in Social Sciences and Education, along with advanced certifications from Tufts University and MIT.

She leads the Interaction, ICT, and Education (ITED) research group and serves as Chair of both the Women's Studies Research Institute and the Digital Culture division at ULL. Carina played a key role in creating the university's Virtual Campus and digital learning platforms and has directed several online master's programs. She also teaches and manages MOOCs on the Miriadax platform.

Carina is President of the Red Universitaria de Campus Virtuales and an active IEEE Senior Member, serving as Editor-in-Chief of IEEE RITA and Associate Editor of IEEE Transactions on Education. She has received multiple national and international awards for her contributions to educational technology.

For over 20 years, her research has focused on educational informatics and human–computer interaction, including intelligent tutoring systems, adaptive interfaces, educational games, gamification, e-learning, and digital culture.

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INVITED SPEAKERS

Prof. Dr. Ángeles Bueno Villaverde

Universidad Camilo José Cela (UCJC)

Short-Bio:

Prof. Dr. Ángeles Bueno Villaverde is a distinguished scholar and educator at Universidad Camilo José Cela (UCJC) in Madrid, where she has been a faculty member since 2000. She holds a PhD in Educational Psychology from the Complutense University of Madrid, along with advanced qualifications in international education, bilingual education, and giftedness and neuropsychology. Throughout her career, she has served in several academic leadership roles, including Academic Secretary of the Faculty of Education, Quality Coordinator, and Coordinator of the International Baccalaureate Certificate in Teaching and Learning. Her research focuses on student and family engagement, cooperative learning, differentiated instruction, inclusion of gifted learners, and international bilingual education. Prof. Bueno Villaverde has supervised numerous doctoral dissertations and contributed to scholarly publications and conferences, advancing evidence-based and inclusive teaching practices in both national and international contexts.

INVITED SPEAKERS

Dr. Akın Gürbüz

Muğla Sıtkı Koçman University & Vilnius University

Short-Bio:

Dr. Akın Gürbüz serves as a Lecturer at the School of Foreign Languages of Muğla Sıtkı Koçman University in Turkey. He earned his bachelor's degree in Foreign Languages Education at Istanbul University – Hasan Ali Yücel Education Faculty in 2004, a master's in English Language Education at Gaziantep University in 2013, and a doctorate in English Language Education at Çukurova University in 2021. His research focuses on EFL/ESL teaching, syllabus design, cultural diversity in language learning, and assessment practices. He has published articles in peer-reviewed journals and authored book chapters on topics such as intercultural communicative competence and online testing processes

ACCEPTED PAPERS

ID	Title	Author(s)	Speaker
2	A Comparative Analysis of Random Forest Model for Breast Cancer Prediction Using a Novel Feature Engineering Technique with Feature Selection and Variance Inflation Factor	Johnson Fashanu, Ahmed Ameen, Mariagorretti Richman	Johnson Fashanu
3	Cracking the Code of Big Data Analytics	Goutam Ghoshal	Goutam Ghoshal
4	Leveraging AI for Improved Requirements Engineering_ A Complete Approach	Vaishnavi Gudur	Vaishnavi Gudur
5	Design Science and Applied Mathematics in Smart Manufacturing and Logistics: Toward a Big Data-Driven System	Ângela Filipa Brochado, Eugénio Rocha	Ângela Filipa Brochado
6	Joint optimization of disassembly line balancing and vehicle routing in a green supply chain context	Hayrettin Gök, Ömer Nedim Kenger, Zülal Kenger	Hayrettin Gök
7	Facility Location Optimization for Fire Stations in the Central District of Gaziantep	Ömer Nedim Kenger, Zülal Diri Kenger	Zülal Diri Kenger
8	A Decision Support Model for the Optimal Placement of Smart Benches	Hüseyin Başaran, Süleyman Mete	Hüseyin Başaran
9	Disassembly Line Rebalancing under Robot Failures and Preventive Maintenance: A Human–Robot Collaboration Based Mixed Integer Programming Model	Dursun Emre Epcim, Süleyman Mete	Dursun Emre Epcim
10	An AI-Based Decision Support System for Multi-Dimensional Sustainability in Logistics Operations	Nur Sena Ertem, Eren Özceylan	Nur Sena Ertem
11	Supplier Selection in the Context of Twin Transformation	Tuba Koçer, İrem Helvacıoğlu	Tuba Koçer
12	Nonlinear Optimization Model for Container and Operational Planning	Eugénio Alexandre Miguel Rocha, Ângela F. Brochado	Eugénio Alexandre Miguel Rocha
13	INTEGRATED PARALLEL MACHINE SCHEDULING AND AGV ROUTING: A CONSTRAINT PROGRAMMING APPROACH	Zeynel Abidin Çil, Damla Kizilay, Hande Öztop	Zeynel Abidin Çil

ACCEPTED PAPERS

14	SIMULATION OF ELECTRIC VEHICLE CHARGING STATIONS WITH LATERAL TRANSSHIPMENT	Sinem Özkan, Zeynel Abidin Çil, Damla Kızılay Ödemiş	Sinem Özkan
15	Kicking Ahead: Ball Trajectory Prediction with Recurrent Neural Networks in Soccer	Hanan Abu Kwaider, Faruk Serin	Hanan Abu Kwaider
16	Smart Waste Management Using EGrab-Bot 2.0: An AI and Robotics-Based Approach	Bhai Nhuraisha Deplomo	Bhai Nhuraisha Deplomo
21	From Cave Walls to Artificial Intelligence: The Historical Evolution of Educational Technology	Bekir Demircan	Bekir Demircan
22	Comparative Analysis of ByteTrack, YOLOv11n, SAM2 and RF-DETR in Multi-Human Tracking	Rahef Elibraş, Faruk Serin	Rahef Elibraş
23	A Comparative Analysis of Machine Learning Algorithms for Predicting Fire Radiative Power	İbrahim Miraç ELİGÜZEL, Hüseyin TERZİ	İbrahim Miraç ELİGÜZEL
24	Inverse Spectral Analysis of Zero-Diagonal Jacobi Matrix with Double Asymmetry via the Parseval Equality	Bayram Bala	Bayram Bala
25	Study in Compound-Gaussian Lognormal Texture Modeling	Douiou Zoulikha, Ali Atallaoui	Douiou Zoulikha
26	Poincaré-Friedrichs Inequalities For Broken-Sobolev/Polynomial Spaces	Oussama Boussoufa	Oussama Boussoufa
27	The Physical Internet: A Paradigm Shift in Logistics and Supply Chain Management	Andrea Falegnami, Andrea Tomassi, Dario Assante	Andrea Falegnami
28	Comparative Analysis of Repetitive Movements in Videos Using Various Methods	Yasin Badur, Faruk Serin	Yasin BADUR
29	Examining the Effect of Artificial Intelligence-Based STEAM Activities on Middle School Students' Mathematics Achievement	Özge Yoldaş	Özge Yoldaş

ACCEPTED PAPERS

30	Logistics Optimization in Smart Cities Improving E-Commerce Delivery	Gizem Şahin,Yunus Eroğlu	Gizem Şahin
31	Research Trends on Drone Applications in Humanitarian Aid Logistics	Zeynep Yüksel, Süleyman Mete	Zeynep Yüksel
32	Trend Analysis and Machine Learning-Based Forecast Method of Climatic Parameters and Evapotranspiration for Southern Turkey	Ali Cüvitoğlu, Fatma Deniz	Ali Cüvitoğlu
33	Technology Use in the Context of 21st-Century Teacher Competencies	MEHMET UÇAR	MEHMET UÇAR
34	REAL-TIME ANOMALY DETECTION IN THE FOG COMPUTING ARCHITECTURE OF THE INTERNET OF THINGS	Rıza ALTUNAY	Rıza ALTUNAY
35	Investigation of Digital Laziness in The AI Age	Gizem Değirmenci, İrem Nil Tatar, Ada Köse, Burçe Ada Yılmaz, Defne Yeniocak, Ece Dünya Küçük, Esma Kabaali, Eylül Gümüş, Hamza Taşçıoğlu, Nadire Kuseyrioğlu, Nilbade Yıldız, Nurten Nil Köse, Rüzgar Boyacı, Serra Şengül	İrem Nil Tatar
36	How a Magnetic Field Changes the Polarization of Twisted (Radially Polarized) Light	Fatma TAMBAĞ, Koray KÖKSAL	Fatma TAMBAĞ
37	WEARABLE TECHNOLOGIES AND SPORTS: INNOVATIONS IN PERFORMANCE MONITORING, HEALTH TRACKING, AND ATHLETE DEVELOPMENT	Cengiz Güler	Cengiz Güler
40	Central Bank Digital Currencies (CBDCs): Redefining Money and Banking	Nihad Babayev, Aygun Abdulova	Nihad Babayev
41	Disassembly Line Balancing Problem Based on Human-Cobot Collaboration with Ergonomics Constraints In The Industry 5.0 Era	Seda Hezer	Seda Hezer
42	Generation of Orbital Angular Momentum (OAM) Beams from Natural Light Sources	Mahmud Tekin, Koray Köksal	Mahmud Tekin

ACCEPTED PAPERS

43	Pre-Service Teachers' Perspectives on AI-Supported Learning: Insights from a Qualitative Study	Bülent DÖŞ	Bülent DÖŞ
44	Eco-Friendly Sand-Concrete Composite: Integrating Recycled PVC for Improved Thermal and Environmental Properties	Hamed Aboulkacem Moutie, Zeghichi Leila , Gadri Karima	Hamed Aboulkacem moutie
45	Reimagining Early Literacy: An AI-Powered Interactive Book Selection System for Preschool Children	Halil Çatak, Ali Kendir, Ayaz Baki Durkut, Doğan Adnan Akarsu, Berke Yavuz, Ahmetcan Kul	Ayaz Baki Durkut
46	Identifying Algebraic Thinking Patterns of Graduate Mathematics Teachers	İrem Dağ, Ali Bozkurt	İrem Dağ
47	Production of Bioplastics for Waste Management and Sustainable Material Technologies	Defne Yeniocak, İrem Nil Tatar, Rüzgar Boyacı	Defne Yeniocak
48	Silent Call - Health Tech	Hüsamettin GÖKOĞLU	Hüsamettin GÖKOĞLU
49	PetRevive	Gamze Türkmen Yubaş	Gamze Türkmen Yubaş
50	Time is Life: Artificial Intelligence-Supported Smart Stop Cancellation System in Patient Elevators	Nazlı Aydın, Elif Zehra Taşdemir, Ulus Atalay, Osman Batu Erol	Nazlı Aydın
51	STAR (Voice Detection and Perception Guide)	Nazlı Aydın, Demir Bülbüloğlu, Yiğit Çalışkan, Cantuğ Mete Yaya, Batuhan Kuşderci, Berika Su Erdem, Onur Taha Akyol	Nazlı Aydın
52	EditorAI	Adem Ünlü, Kutluhan Danayiyen, Mehmet Atilla Alp Arslan, Cesur Kuzey Aycan	Adem Ünlü
53	The Global Cybersecurity Index and Türkiye: An Assessment of Increasing Measures in Digital Transformation	Rüstem Barış YEŞİLAY	Rüstem Barış YEŞİLAY

PROGRAM OVERVIEW
Location: Ergife palace hotel, Largo Lorenzo Mossa, 8 - 00165 ROME - Italy

Saturday, November 22

08:30 – 09:00	Registration	Conference Registration Desk	
09:00 – 09:30	Openning Ceremony	Orhan CEVIK Assoc. Prof. Dr. Süleyman METE Assoc. Prof. Dr. Dario ASSANTE	Main Hall
09:30 – 11:00	Invited Speaker Sessions	Prof. Dr. Anett Wolgast Prof. Dr. Euripides Hatzikraniotis Assoc. Prof. Dr. Ovidiu Ivancu Dr. Julija Grigorjevaitė Prof. Dr. Carina Gonzalez Prof. Dr. Ángeles Bueno Villaverde Dr. Akın Gürbüz	Main Hall
11:00 – 11:30	Coffee Break		
11:30 – 12:45	Session I (In-Person)		Main Hall
12:45 – 13:00	Coffee Break		
13:00 – 14:15	Session II (In-Person)		Main Hall
14:15 – 14:30	Coffee Break		
14:30 – 15:45	Session III (In-Person)		Main Hall
15:45 – 16:00	Coffee Break		
16:00 – 17:00	Session IV (In-Person)		Main Hall

PROGRAM OVERVIEW
Location: Ergife palace hotel, Largo Lorenzo Mossa, 8 - 00165 ROME - Italy

Sunday, November 23

10:00 – 11:15	Session V (In-Person)	Main Hall	Virtual Session I
11:15 – 11:30	Coffee Break		
11:30 – 12:45	Session VI (In-Person)	Main Hall	Virtual Session II
12:45 – 14:00	Lunch		
14:00 – 15:15	Virtual Session III		
15:15 – 15:30	Coffee Break		
15:30 – 16:30	Virtual Session IV		

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ON-SITE

SESSION I

	22.11.2025 - SATURDAY Time (GMT + 1) : 11:30 – 12:45
	Chair: Prof. Dr. Rüstem Barış YEŞİLAY
HALL 1	**Design Science and Applied Mathematics in Smart Manufacturing and Logistics: Toward a Big Data-Driven System** Ângela Filipa Brochado*, Eugénio Rocha
	INTEGRATED PARALLEL MACHINE SCHEDULING AND AGV ROUTING: A CONSTRAINT PROGRAMMING APPROACH Zeynel Abidin Çil*, Damla Kizilay, Hande Öztop
	The Physical Internet: A Paradigm Shift in Logistics and Supply Chain Management Andrea Falegnami*, Andrea Tomassi, Dario Assante
	Nonlinear Optimization Model for Container and Operational Planning Eugénio Alexandre Miguel Rocha*, Ângela F. Brochado
	Supplier Selection in the Context of Twin Transformation Tuba Koçer*, İrem Helvacıoğlu

SESSION II

	22.11.2025 - SATURDAY Time (GMT + 1) : 13:00 – 14:15
	Chair: Assoc. Prof. Dr. Zeynel Abidin ÇİL
HALL 1	**SIMULATION OF ELECTRIC VEHICLE CHARGING STATIONS WITH LATERAL TRANSSHIPMENT** Sinem Özkan*, Zeynel Abidin Çil, Damla Kızılay Ödemiş
	WEARABLE TECHNOLOGIES AND SPORTS: INNOVATIONS IN PERFORMANCE MONITORING, HEALTH TRACKING, AND ATHLETE DEVELOPMENT Cengiz Güler*
	Smart Waste Management Using EGrab-Bot 2.0: An AI and Robotics-Based Approach Bhai Nhuraisha Deplomo*
	Eco-Friendly Sand-Concrete Composite: Integrating Recycled PVC for Improved Thermal and Environmental Properties Hamed Aboulkacem Moutie*, Zeghichi Leila , Gadri Karima
	Pre-Service Teachers' Perspectives on AI-Supported Learning: Insights from a Qualitative Study Bülent DÖŞ*

SESSION III

	22.11.2025 - SATURDAY **Time (GMT + 1) : 14:30 – 15:45**
	Chair: Dr. Andrea TOMASSI
HALL 1	**Inverse Spectral Analysis of Zero-Diagonal Jacobi Matrix with Double Asymmetry via the Parseval Equality** Bayram Bala*
	Research Trends on Drone Applications in Humanitarian Aid Logistics Zeynep Yüksel*, Süleyman Mete
	A Decision Support Model for the Optimal Placement of Smart Benches Hüseyin Başaran*, Süleyman Mete
	Examining the Effect of Artificial Intelligence-Based STEAM Activities on Middle School Students' Mathematics Achievement Özge Yoldaş*
	Identifying Algebraic Thinking Patterns of Graduate Mathematics Teachers İrem Dağ*, Ali Bozkurt

SESSION IV

	22.11.2025 - SATURDAY **Time (GMT + 1) : 16:00 – 17:15**
	Chair: Dr. Andrea FALEGNAMI
HALL 1	**From Cave Walls to Artificial Intelligence: The Historical Evolution of Educational Technology** Bekir Demircan*
	REAL-TIME ANOMALY DETECTION IN THE FOG COMPUTING ARCHITECTURE OF THE INTERNET OF THINGS Rıza ALTUNAY*
	Investigation of Digital Laziness in The AI Age Gizem Değirmenci, İrem Nil Tatar*, Ada Köse, Burçe Ada Yılmaz, Defne Yeniocak, Ece Dünya Küçük, Esma Kabaali, Eylül Gümüş, Hamza Taşçıoğlu, Nadire Kuseyrioğlu, Nilbade Yıldız, Nurten Nil Köse, Rüzgar Boyacı, Serra Şengül
	Technology Use in the Context of 21st-Century Teacher Competencies MEHMET UÇAR*

SESSION V

	23.11.2025 - SUNDAY **Time (GMT + 1) : 10:00 – 11:15**
	Chair: Prof. Dr. Muhammet GÜL
HALL 1	**The Global Cybersecurity Index and Türkiye: An Assessment of Increasing Measures in Digital Transformation** Rüstem Barış YEŞİLAY*
	EditorAI Adem Ünlü*, Kutluhan Danayiyen, Mehmet Atilla Alp Arslan, Cesur Kuzey Aycan
	Silent Call - Health Tech Hüsamettin GÖKOĞLU*
	Time is Life: Artificial Intelligence-Supported Smart Stop Cancellation System in Patient Elevators Nazlı Aydın*, Elif Zehra Taşdemir, Ulus Atalay, Osman Batu Erol
	STAR (Voice Detection and Perception Guide) Nazlı Aydın*, Demir Bülbüloğlu, Yiğit Çalışkan, Cantuğ Mete Yaya, Batuhan Kuşderci, Berika Su Erdem, Onur Taha Akyol

SESSION VI

	23.11.2025 - SUNDAY **Time (GMT + 1) : 11:30 – 12:45**
	Chair: Prof. Dr. Caner GİRAY
HALL 1	**PetRevive** Gamze Türkmen Yubaş*
	Reimagining Early Literacy: An AI-Powered Interactive Book Selection System for Preschool Children Halil Çatak, Ali Kendir, Ayaz Baki Durkut*, Doğan Adnan Akarsu, Berke Yavuz, Ahmetcan Kul
	Production of Bioplastics for Waste Management and Sustainable Material Technologies Defne Yeniocak*, İrem Nil Tatar, Rüzgar Boyacı

ONLINE

VIRTUAL SESSION I

23.11.2025 - SUNDAY Time (GMT + 1) : 10:00 – 11:15
Chair: Assist. Prof. Dr. Yunus Eroğlu Online Session : https://zoom.us/j/93303823003?pwd=iZcOgKjGmkyu0CB4qKD4rZtPbXAE3q.1

ONLINE	**A Comparative Analysis of Random Forest Model for Breast Cancer Prediction Using a Novel Feature Engineering Technique with Feature Selection and Variance Inflation Factor** Johnson Fashanu*, Ahmed Ameen, Mariagorretti Richman
	Leveraging AI for Improved Requirements Engineering_ A Complete Approach Vaishnavi Gudur*
	An AI-Based Decision Support System for Multi-Dimensional Sustainability in Logistics Operations Nur Sena Ertem*, Eren Özceylan
	Kicking Ahead: Ball Trajectory Prediction with Recurrent Neural Networks in Soccer Hanan Abu Kwaider*, Faruk Serin
	Trend Analysis and Machine Learning-Based Forecast Method of Climatic Parameters and Evapotranspiration for Southern Turkey Ali Cüvitoğlu*, Fatma Deniz

VIRTUAL SESSION II

23.11.2025 - SUNDAY Time (GMT + 1) : 11:30 – 12:45
Chair: Assist. Prof. Dr. Ömer Nedim KENGER Online Session : https://zoom.us/j/93995879367?pwd=3laDbijktOlQEkPVSC0jGIXe0FQ6ad.1

ONLINE	**Cracking the Code of Big Data Analytics** Goutam Ghoshal*
	Joint optimization of disassembly line balancing and vehicle routing in a green supply chain context Hayrettin Gök*, Ömer Nedim Kenger, Zülal Kenger
	Facility Location Optimization for Fire Stations in the Central District of Gaziantep Ömer Nedim Kenger, Zülal Diri Kenger*
	Disassembly Line Rebalancing under Robot Failures and Preventive Maintenance: A Human–Robot Collaboration Based Mixed Integer Programming Model Dursun Emre Epcim*, Süleyman Mete
	Disassembly Line Balancing Problem Based on Human-Cobot Collaboration with Ergonomics Constraints In The Industry 5.0 Era Seda Hezer*

VIRTUAL SESSION III

23.11.2025 - SUNDAY Time (GMT + 1) : 14:00 – 15:15

Chair: Assist. Prof. Dr. İbrahim Miraç ELİGÜZEL
Online Session : https://zoom.us/j/99136249224?pwd=gaRMgitb7GoJbzUuwWPq7c378LqafY.1

ONLINE	**Comparative Analysis of ByteTrack, YOLOv11n, SAM2 and RF-DETR in Multi-Human Tracking** Rahef Elibraş*, Faruk Serin
	A Comparative Analysis of Machine Learning Algorithms for Predicting Fire Radiative Power İbrahim Miraç ELİGÜZEL*, Hüseyin TERZİ
	Comparative Analysis of Repetitive Movements in Videos Using Various Methods Yasin Badur*, Faruk Serin
	Logistics Optimization in Smart Cities Improving E-Commerce Delivery Gizem Şahin*,Yunus Eroğlu
	Central Bank Digital Currencies (CBDCs): Redefining Money and Banking Nihad Babayev*, Aygun Abdulova

VIRTUAL SESSION IV

23.11.2025 - SUNDAY Time (GMT + 1) : 15:30 – 16:30

Chair: Assist. Prof. Dr. Zülal KENGER
Online Session : https://zoom.us/j/91211158354?pwd=5ESLxJba7aNDTmpFaLoIuIoC1LJ6d0.1

ONLINE	**Study in Compound-Gaussian Lognormal Texture Modeling** Douiou Zoulikha*, Ali Atallaoui
	Poincaré-Friedrichs Inequalities For Broken-Sobolev/Polynomial Spaces Oussama Boussoufa*
	How a Magnetic Field Changes the Polarization of Twisted (Radially Polarized) Light Fatma TAMBAĞ*, Koray KÖKSAL
	Generation of Orbital Angular Momentum (OAM) Beams from Natural Light Sources Mahmud Tekin*, Koray Köksal

ITECX '25

Fibonacci

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Contact Information

For any inquiries or issues related to ITECX'25, please reach out to our dedicated team. We are here to assist you with all aspects of the conference. All questions and concerns can be directed to our official email:

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