

9th EAI International Conference on

E-LEARNING E-EDUCATION AND ONLINE TRAINING

AUGUST 17-18, 2023 | YANTAI, CHINA



Welcome to ELEOT 2023 by the General Conference Chairs and TPC Chairs

As the general and TPC chairs of 9th EAI International Conference on e-Learning e-Education and Online Training (ELEOT 2023), it is our great pleasure to welcome you to the proceedings of the conference, which will be held in Yantai, China, during August 17–18, 2023, hosted by Yantai University.

As the world of technology offers a rapidly increasing number of outlets for creativity and communications, the world of education is undergoing a significant renovation. Each day more classrooms can be accessed from anywhere, at any time. This year's conference aims at exploring e-learning solutions that spark the attention as well as imagination of students through interactivity, immersion, variety of content, or cutting-edge technologies.

Thus, this conference aims to provide a forum for the scientists, engineers, and educators in the fields of computer science, control science and electric engineering, and to provide an opportunity for researchers to publish their gifted theoretical and technological studies of advanced methods in hybrid information processing, and their novel engineering applications within this domain.

We would like to thank all the members of the program committee for their hard work in completing the review tasks. Their collective efforts made it possible to attain quality reviews for all the submissions within a few weeks. Their diverse expertise in each individual research area helped us to create an exciting program for the conference. Their comments and advice helped the authors to improve the quality of their papers and gain deeper insights. Our thanks also go to the authors and participants for their tremendous support in making the conference a success.

On behalf of the entire program committee I wish you enjoy a fruitful conference full of talks and thoughts, whether these thoughts are sparked during the actual conference or later on while reading the proceedings. Let the debates begin!

Ying Li Yun Lin Danda Rawat Joey Tianyi Zhou Guan Gui Shifeng Ou General Chair FLFOT 2023

KEYNOTE SPEAKERS	4
SESSION OVERVIEW	5
CONFERENCE PROGRAM	7
CONFERENCE COMMITTEES	13
CONFERETNCE VENUE	15
THINGS TO DO	16
EAI SUMMITS	19
BECOME EAI MEMBER	20
ABOUT EAI	21



KHAN MUHAMMAD

Khan Muhammad (S'16–M'18, SM'22) received his Ph.D. in Digital Contents from Sejong University, Republic of Korea in February 2019. He was an Assistant Professor in the Department of Software, Sejong University, from March 2019 to February 2022. He is currently the Director of the Visual Analytics for Knowledge Laboratory (VIS2KNOW Lab) and an Assistant Professor (Tenure-Track) with the Department of Applied AI, School of Convergence, College of Computing and Informatics, Sungkyunkwan University, Seoul, Republic of Korea. His research interests include intelligent video surveillance, information security, video summarization, and smart cities. He has registered 10 patents and contributed 220+ papers in peer-reviewed journals and conference proceedings in his research areas. His contributions have received 15250+ citations to date, with an H-index of 67. He is an Associate Editor/ Editorial Board Member for more than 14 journals. He is among the most highly cited researchers in 2021 and 2022 according to the Web of Science (Clarivate).



FARMAN ALI

Farman Ali is currently working as an Assistant Professor in the Department of Software, Sejong University, South Korea. He received his B.S. degree in computer science from the University of Peshawar, Pakistan, in 2011, an M.S. degree in computer science from Gyeongsang National University, South Korea, in 2015, and a Ph.D. degree in information and communication engineering from Inha University, South Korea, in 2018. He worked as a Post-Doctoral Fellow at the UWB Wireless Communications Research Center, Inha University, from September 2018 to August 2019. He has registered over 4 patents and published more than 90 research articles in reputable international conferences and journals. His research interests include sentiment analysis, Intelligent transportation system, data science, text mining, recommendation system, healthcare monitoring system, ontology, fuzzy logic, and type-2 fuzzy logic, artificial intelligence, and deep learning. He serves as an Associate Editor for international journals, including *CSSE-Computer Systems Science and Engineering*, and *Frontiers in Big Data*.

Day 1- Thursday, 17 April 2023

	Day 1– Thursday, 17 April 2023
08:00-09:30	Registration (In lobby of 5th Building of Dongshan Hotel, Yantai) 东山宾馆五号楼一楼大厅
09:30-09:40	Welcome (1st Conference room, 5th Building of Dongshan Hotel, Yantai) 东山宾馆五号楼第一会议室
10:00-10:40	Keynote Speech I
10:40-11:00	Coffee Break (Lounge , 5th Building of Dongshan Hotel, Yantai) 东山宾馆五号楼休息室
11:00-11:40	Keynote Speech II
12:00-13:00	Lunch (1F, Banquet room, 5th Building of Dongshan Hotel, Yantai) 东山宾馆一楼宴会厅
13:30-15:00	Sessions 1 (2nd Conference room, 5th Building of Dongshan Hotel, Yantai) 东山宾馆五号楼第二会议室 Sessions 2 (3rd Conference room, 5th Building of Dongshan Hotel, Yantai) 东山宾馆五号楼第三会议室
15:00-15:30	Coffee break (Lounge , 5th Building of Dongshan Hotel, Yantai) 东山宾馆五号楼休息室
15:30-17:00	Sessions 3 (2nd Conference room, 5th Building of Dongshan Hotel, Yantai) 东山宾馆五号楼第二会议室 Sessions 4 (3rd Conference room, 5th Building of Dongshan Hotel, Yantai) 东山宾馆五号楼第三会议室
17:30-19:00	Dinner (1F, Banquet room, 5th Building of Dongshan Hotel, Yantai) 东山宾馆一楼宴会厅

Day 2- Fridays, 18 April 2023

08:30-10:00 10:00-10:30	Sessions 5 (2nd Conference room, 5th Building of Dongshan Hotel, Yantai) 东山宾馆五号楼第二会议室 Sessions 6 (3rd Conference room, 5th Building of Dongshan Hotel, Yantai) 东山宾馆五号楼第三会议室 Coffee Break
	(Lounge, 5th Building of Dongshan Hotel, Yantai) 东山宾馆五号楼休息室
10:30-12:00	Sessions 7 (2nd Conference room, 5th Building of Dongshan Hotel, Yantai) 东山宾馆五号楼第二会议室 Sessions 8 (3rd Conference room, 5th Building of Dongshan Hotel, Yantai) 东山宾馆五号楼第三会议室
12:00-13:00	Lunch (1F, Banquet room, 5th Building of Dongshan Hotel, Yantai) 东山宾馆一楼宴会厅
14:00-15:00	Sessions 9 (2nd Conference room, 5th Building of Dongshan Hotel, Yantai) 东山宾馆五号楼第二会议室 Sessions 10 (3rd Conference room, 5th Building of Dongshan Hotel, Yantai) 东山宾馆五号楼第三会议室
15:00-15:30	Coffee break (Lounge, 5th Building of Dongshan Hotel, Yantai) 东山宾馆五号楼休息室
15:30-16:30	Sessions 11 (2nd Conference room, 5th Building of Dongshan Hotel, Yantai) 东山宾馆五号楼第二会议室 Sessions 12 (3rd Conference room, 5th Building of Dongshan Hotel, Yantai) 东山宾馆五号楼第三会议室

Session 1 (13:30-15:00)

(2nd Conference room, 5th Building of Dongshan Hotel, Yantai)

东山宾馆五号楼第二会议室

332058	Educational Information Retrieval Method for Innovative Entrepreneurship Training of Accounting Talents Based on Deep Learning
332443	Evaluation Method of Online Teaching Effect of Chinese Painting Art Appreciation Course in Colleges and Universities Based on Machine Learning Model
332077	Evaluation Method of Online Education Quality of E-commerce Course in Higher Vocational Education Based on Machine Learning Model
332475	On Line Teaching Data Classification Method for Ramp Control Specialty in Universities Based on Machine Learning Model
332010	Evaluation Method of English Online Education Effect Based on Machine Learning Algorithm
331901	Research on Enterprise Education Information Retrieval Model Based on Machine Learning
332292	The Detection of English Students' Classroom Learning State in Higher Vocational Colleges Based on Improved SSD Algorithm
332440	A Recommended Method for Teaching Information Resources of English Chinese Translation Based on Deep Learning
332132	Attitude Target Tracking of Kabadi Athletes Based on Machine Learning

Session 2 (13:30-15:00)

(3rd Conference room, 5th Building of Dongshan Hotel, Yantai)

332429	Design of Intelligent Integration System for Online Curriculum Resources of Mechanical Engineering Specialty Based on Fuzzy Clustering
332474	Research on the Model of Teaching Staff Allocation in Private Universities Based on Discrete Firefly Algorithm
331953	Research on Information Fusion Method of English Teaching Reform Based on Reinforcement Learning
332470	Construction of English Intelligent Teaching System Evaluation System Based on Big Data Technology
331920	Balanced Distribution of Online Teaching Resources for Financial Management Specialty Based on Content Clustering
332435	A Resource Sharing Method of Higher Vocational Distance Online Education Based on Sparse Clustering Algorithm
332458	Evaluation Method of Innovation and Entrepreneurship Education Teaching Effect Based on Fuzzy Clustering
332473	Research on the Competency Evaluation of Teaching Positions of Private University Teachers Based on K-means Clustering Algorithm
332431	A Method for Sharing Economic Law Teaching Curriculum Resources Based on WEB Data Mining

Session 3 (15:30-17:00)

(2nd Conference room, 5th Building of Dongshan Hotel, Yantai)

东山宾馆五号楼第二会议室

332469	Personalized Recommendation of English Chinese Translation Teaching Information Resources Based on Transfer Learning
332183	Research on Evaluation Method of Medical Rehabilitation Teaching Quality Based on Historical Big Data Decision Tree Classification
332122	A Method for Identifying Abnormal Behaviors in College English Smart Classroom Teaching Based on Deep Learning
331912	Design of Teaching Resources Sharing Method for Economics Major Based on Federal Learning
332151	A Method of Identifying the Difficulty of College Piano Teaching Music Score Based on SVM Algorithm
332140	Personalized Recommendation Method of Online Education Resources for Tourism Majors Based on Machine Learning
331906	Automatic Classification and Sharing of Teaching Resources in English Online Teaching System Based on SVM
331969	Teaching Effect of College English Based on Cloud Class Platform
332448	Data Association Mining Method of Vocational College Students' Employment Education Based on Machine Learning Model
332441	A Personalized Course Content Pushing Method Based on Machine Learning for Online Teaching of English Translation

Session 4 (15:30-17:00)

(3rd Conference room, 5th Building of Dongshan Hotel, Yantai)

331913	The Incremental Updating Method of Economics Teaching Resource Database Data
332130	Automatic Generation of Multidimensional Labels of Educational Resources Based on Grey Clustering
332175	Big Data Resource Allocation of Animation Design Intelligent Education System Based on Ant Colony Algorithm
332436	Personalized Recommendation Method of Ideological and Political Education Resources Based on Data Mining
332472	Design of Online Teaching Resources Management System Based on Distributed Database
332430	Design of Online Teaching Resources Sharing System for Computer Specialty Based on Fuzzy Clustering Algorithm
332447	Prediction Method of Higher Vocational Students' Psychological Health Education Achievements Based on Big Data Mining Technology
332152	Integration and Sharing Method of Chorus Music Education Big Data Based on Reinforcement Learning

Session 5 (8:30-10:00)

(2nd Conference room, 5th Building of Dongshan Hotel, Yantai)

东山宾馆五号楼第二会议室

332170	Research on Personalized Recommendation of Online Learning Resources for Innovation and Entrepreneurship among College Students
332171	Design of Adaptive Integration Algorithm of Network Learning Resources for Labor Education
332482	Personalized Recommendation Method of Online Distance Teaching Resources Based on User Profiles
332321	Cloud Computing-based Sharing Platform for High-quality Teaching Resources of Higher Vocational Physical Education
331991	Online Educational Resources Recommendation Algorithm for English Translation Course Based on Collaborative Filtering
332465	Research on the Integration Method of Sports Online Teaching Resources Based on Association Rules
331877	Collaborative Filtering Recommendation of Online Learning Resources for E-commerce Logistics Talent Training
332135	Intelligent Integration Method of Hidden Resources of Ideological and Political Courses for Mobile Online Teaching

Session 6 (8:30-10:00)

(3rd Conference room, 5th Building of Dongshan Hotel, Yantai)

332174	Evaluation Model of Art Design Intelligent Education System Based on Grey Relational Analysis
332477	Research on the Quality Evaluation of Online Teaching of Instrument Analysis Courses in Universities Based on Analytic Hierarchy Process
332460	A Method for Evaluating the Quality of Distance Education in Universities Based on Fuzzy AHP
332136	Prediction Method of Online Teaching Effect of Career Guidance Course Based on Multi task Learn
332310	Design of a Web-Based Computer-Aided Teaching System for Fault Diagnosis
331876	Research on Online Education Quality Evaluation of E-Commerce Logistics Based on Entropy Weight TOPSIS
332464	Evaluation Method of Hybrid Teaching Reform System Based on the Analysis of Characteristics of Higher Vocational Schools
332144	Evaluation Method of Teaching Effect of Online Physical Education Based on Fuzzy AHP
332481	Evaluation Method of Distance Teaching Effect Based on Student Behavior Data Mining

Session 7 (10:30-12:00)

(2nd Conference room, 5th Building of Dongshan Hotel, Yantai)

东山宾馆五号楼第二会议室

332311	Research on the Integration of Multimodal Online Teaching Resources for Aircraft Electromechanical Equipment Maintenance Specialty
332293	A Recommendation Algorithm for Online English Reading Courses in Higher Vocational Colleges Based on Differential Privacy
331983	Korean Online Education Curriculum Resources Recommendation Method Based on User Preference Model
331973	Data Mining Based Method for Integrating Online English SPOC Curriculum Resources
331974	Multi Source Collection Method of Service QoS Data for Intelligent Business English Teaching System
332125	Recommendation of Massive English Teaching Video Resources Based on Knowledge Graph
331944	Intelligent Recommendation Method of Online Teaching Resources for Business English Collaborative Learning
332059	University Economics Teaching Resources Sharing System Based on Cloud Service Platform
332060	Personalized Recommendation Method of Economics Online Teaching Curriculum Resources Based on Fuzzy Analytic Hierarchy Process

Session 8 (10:30-12:00)

(3rd Conference room, 5th Building of Dongshan Hotel, Yantai)

331938	Design of Ideological and Political Network Teaching Assistant System Based on ZigBee
332150	OBE+CIPP based Quality Evaluation Method for College Classroom Intelligent Education System
331947	Web Service Based Oral English Teaching Assistant Training System
331853	A Method for Detecting False Pronunciation in Japanese Online Teaching
332467	Evaluation Method of English Distance Teaching Quality in Online Education Platform
332478	Correlation Analysis of Physical Education Teaching Quality Assessment Based on Fuzzy Comprehensive Evaluation
332439	Research on the Intelligent Evaluation Method of Integrating Teaching Quality of "Post Course Competition Certificate" in Higher Vocational English
332442	Machine Translation Error Recognition of English Online Education Resources Based on Informative Text

Session 9 (14:00-15:00)

(2nd Conference room, 5th Building of Dongshan Hotel, Yantai)

东山宾馆五号楼第二会议室

332118	Distribution of Sports Online Video Teaching Resources under the Background of Sunshine Sports
332325	Parallel Integration Method of Physical Education Information Based on Multi machine Learning Model
332076	Distance Education Platform for Mental Health Courses in Secondary Vocational Schools Based on Cloud Computing
332471	Research on Multimedia Distance Education Resource Management System Based on Knowledge Graph
332476	Push Method of Chinese Online Education Personalized Course Content for Foreign Students
332457	University Innovation and Entrepreneurship Education Resource Sharing System Based on Cloud Service Platform
332179	English Literature Appreciation Teaching Resources Retrieval System Based on Mutual Information Entropy
332432	Design of Push Algorithm for Individualized Course Content of College Public Art Education Online Education
332466	Research on Abnormal Identification of User Behavior Data on Sports Mobile Education Platform

Session 10 (14:00-15:00)

(3rd Conference room, 5th Building of Dongshan Hotel, Yantai)

332322	A Key Frame Extraction Algorithm for Physical Education Teaching Video Based on Compressed Domain
332180	Multi Agent Based High School Physics Network Course Automatic Generation System
332138	Multi Agent Based Network Collaborative Learning Support System for Mathematics Curriculum
332459	Research on English Online Video Teaching System Based on Streaming Media Technology
332146	Online Educational Video Scoring System for Physical Education
332050	Design of Online Network Multi Module Teaching System for ERP Sand Table Simulation Course
332127	Reliability Analysis of 3D Light Rail Landscape Interactive Design Teaching System Based on Virtual Reality
332438	Research on the Employment Prediction Method of College Students under the Background of Mass Entrepreneurship and Innovation Education

Session 11 (14:00-15:00)

(2nd Conference room, 5th Building of Dongshan Hotel, Yantai)

东山宾馆五号楼第二会议室

332188	Research on Multi-level Recommendation Method of Medical Rehabilitation Teaching Resources Based on Gray Correlation Method
332034	Research on the Integration Method of Ideological and Political Teaching Resources Based on Mobile Terminal
331851	Japanese Online+Offline Hybrid Educational Resources Sharing System Based on Data Classification
332120	Research on Online and Offline Interactive Teaching Platform of College Physical Education for Sunshine Sports
332324	Research on Resource Classification Method of Mobile Education Platform for Physics Theory Teaching
332167	Ceramic Art Teaching Resource Sharing Platform Based on Classroom Behavior Analysis
332039	Fast Retrieval Method of Learning Resources for Python Online Courses
332042	Online Allocation of Python Online Teaching Resources Based on Global Search Algorithm

Session 12 (15:30-16:30)

(3rd Conference room, 5th Building of Dongshan Hotel, Yantai)

332437	Research on Automatic Generation of English Teaching Information Based on Automatic Extraction of Web Information
332149	Construction of Teaching Quality Evaluation System of Intelligent Education System Under OBE+CIPP Model
332468	Research on Online Education System for College English Majors Based on Cloud Computing
332134	Social Media Text Sentiment Analysis Method Based on Comment Information Mining
332166	Construction of Music Intelligent Interactive Teaching System Based on J2EE Platform
332052	Interactive Design Method of Multi Person VR Distance Education for New Media Art Teaching
332057	Evaluation Method of Online Education Learners' Emotional Input Based on Multimodal Data Fusion
332444	Research on Online Teaching Model of Chinese Traditional Culture under ELF Concept
332055	Interactive Design Method of Mobile Art Education APP Interface Based on Virtual Reality Technology

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DONGSHAN HOTEL



DIRECTIONS

- 1. Yantai Station
- -- Bus: 52 minutes. Take No. 51 and get off at Yantai University East Gate Station. -- Driving: 30 minutes.
- 2. Yantai Penglai Airport
- -- Bus: 1 hour and 25 minutes. Take the airport bus line 3, then get off at Laisan Jiasheke bus stop.
 -- Driving: 47 minutes.

What you can do in Yantai if you have...

1Day

Good for a city tour

Yantai Highlights Tour Seaside night tour Or side car tour Or local food tour



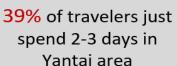
32% of travelers just spend 1 day in Yantai

2-3 Days

Popular for Yantai are

Yantai Highlights Tour Penglai pavilion Kunyu Mountain Yantai Hill





4-7 Days recommend for Yantai and nearby cities

Yantai, Qingdao, and Weihai Bullet Train Tour Weihai Happiness Square

Essence of weihaii Tour





21% of travelers just spend 4-7 days in Yantai area



Yangma Island



Moon Bay



Fisherman's Wharf



Golden Beach



Penglai



Yantai Mountain



Marina Square



Pegasus Trestle Bridge



Mount Foley Park



Kunyu Mountain



Long Island



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#ELEOT 2018

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EAI Summits









Once a year, EAI brings together a comprehensive range of researchers, key industry figures, and innovation stakeholders in Internet of Things, Smart Cities, Future Internet, and eHealth.

At EAI 360° Summits, members get a singular opportunity to exchange experiences from their year-round activities and to turn them into presentations, discussions, demonstrations, and meetings.

EAI 360° Summits are designed to provide a 360 degree perspective on the bleeding edge of ICT, and to help innovative research reach the market through community.

> www.ehealth360.org www.smartcity360.org www.afi360.org www.iot-360.eu

Learn | Network | Plan | Collaborate | Strategize

Get involved

To participate as an organizing committee member or to organize a workshop, panel, or a technical session, let us know at **conferences@eai.eu**.

As an EAI Institutional Member, you get:

- Access to top minds, knowledge, and talent through 80+ annual scientific conferences and summits worldwide
- Exposure in a community of 40.000 ICT experts from 167 countries and 100.000+ subscribers
- Access to best innovation projects through summer schools, tutorials, and funding workshops
- Reduced fees to attend or sponsor EAI events
- Opporunity to co-organize an EAI event
- Share knowledge and ideas in the IAM Innovator magazine and EAI Blog

What we offer:

Community Visibility Prestige

For more information, please contact: secretariat@eai.eu



EAI was created by leaders from industry, research, and policy-making organisations to engage the global community with the shared goal of securing Europe's future competitiveness through innovation.

With over 40.000 members from 167 countries, EAI engages the global community to explore ways in which innovation in technology and business can benefit society at large.

EAI is involved in the technical program development of events, including scientific meetings, trade events, training workshops, seminars, and fairs worldwide.

For more information about EAI events and membership:

Visit:

Or contact:

www.eai.eu

conferences@eai.eu

Thank you for participating at EAI conference and

We hope to see you again!