IEEE ISCSET 2024
13th International Symposium
on Computer Science and Educational Technology

IEEE

IEEE Education Society

IBS

TECHNISCHE UNIVERSITÄT IN DER KULTURHAUPTSTADT EUROPAS CHEMNITZ

13ᵗʰ International Symposium on Computer Science and Educational Technology (ISCSET) 2024 Program

Date: 17ᵗʰ – 19ᵗʰ July | Location: IBS Foundation, Lauta/Laubusch, Germany

Local Time is GMT+02:00

Tuesday	16.07.2024
From 14:00	*Arrival day and Check-in*
	Introduction to IBS
	Preparation for ISCSET 2024

Wednesday	17.07.2024 | Day 1
	Chair: Prof. Uranchimeg Tudevdagva
From 07:00	*Registration and Check in*
10:00 – 10:10	**Opening of IEEE ISCSET 2024** *Prof. Dr. Dr. h. c. Wolfram Hardt* Chemnitz University of Technology, Germany
	Plenary Session
10:10 – 11:00	Keynote Speech **Experiences with Gamified Intelligent Tutor Systems for Programming and Software Engineering Education** *Prof. Dr. Steffen Becker* University of Stuttgart, Germany
	Session 1: Computer Science I | Chair: Dr. Ariane Heller
11:00 – 11:20	**Decentralized UAV Hangar: A Study for Water Rescue Missions** *Reda Harradi,* Ariane Heller, and Wolfram Hardt Chemnitz University of Technology, Germany
11:20 – 11:40	**Design and Implementation of VRUs Detection and Speed Estimation Using an Uncalibrated Top-View Perspective Camera** *Khulan Khalzaa*, Stephen Karungaru, Kenji Terada, and Altangerel Ayush Tokushima University, Japan

Conference fee includes: Lunches, dinners, coffee breaks, and publication.

Wednesday	17.07.2024	Day 1

11:40 – 12:00	**Inner and Outer Frame-based Continues Object-Tracking for MAV-based Inspection** *Batbayar Battseren,* Md Abdul Awal, and Wolfram Hardt Chemnitz University of Technology, Germany

12:00 – 12:20	**Research on the β-VAE-DDRRN-BFA Tool Wear Detection Algorithm** *Kaige Xu*, Xiaoming Sun, Yan Chen, Yongliang Wang, and Bochao Su Harbin University of Science and Technology, China Shenzhen Polytechnic University, China *Online Presentation*

12:30 – 13:30	*Lunch*

**Session 2: Computer Science II	Chair: Dr. Tobias Schlosser**	

13:30 – 13:50	**The Effectiveness of Gamified Applications for Communicating Complex Bureaucratic Topics** Fabius Benjamin Quien, Lilly Siegel, Erwin Dieter Hausmann, Victoria Kitte, *Lara Anna Stahlberg*, Theodor Tran, Leander Benedikt Stedtler, Maria Bianca Florea, Manuel Heinzig, Matthias Vodel, and Marc Ritter University of Applied Sciences Mittweida, Germany

13:50 – 14:10	**Run Time and Accuracy of Machine Learning Algorithms for Speaker Identification** *Stephan Lede,* René Schmidt, and Wolfram Hardt Chemnitz University of Technology, Germany

14:10 – 14:30	**The Algorithm for Classifying Text Data in Social Networks** *Bahrixon Otaxonova*, Yusuf Yuldoshev, Nasibakhon Rasulova, and Dilnoza Zaripova Tashkent University of Information Technologies named after Muhammad al-Khwarizmi, Uzbekistan

14:30 – 14:50	**Development of Enhanced SOTIF Analysis Framework Using MBSE and Virtual Validation with Focus on RSS Framework** *Vignesh Mohan*, Reda Harradi, and Wolfram Hardt Chemnitz University of Technology, Germany

14:50 – 15:10	**Implementation of Machine Learning and Fuzzy-Logic Rules for Intelligent Tutoring System Design on Photography** *Ghita Athalina* and Tomonori Hashiyama University of Electro-Communications, Japan

15:10 – 15:30	**A New Approach for Early Detection of Vulnerabilities Across the Automotive Software Development** *Dimitrios Datsogiannis*, Ariane Heller, and Wolfram Hardt Chemnitz University of Technology, Germany

15:30 – 16:30	*Coffee Break*

	**Session 3: Computer Science III	Chair: Khulan Khalzaa**
16:30 – 16:50	**Dangerous Goods Detection in X-ray Security Inspection Images Based on Improved YOLOv8** *Pengfei Yuan*, Xue Wang, Xinmiao Zhou, Xiaoyu Yu, Aili Wang, and Haibin Wu Harbin University of Science and Technology, China Zhongshan Institute, China *Online Presentation*
16:50 – 17:10	**Cross Scene Hyperspectral Image Classification Combined with Fusional Spatial-Spectral Attention** *Defei Li*, Hui Yang, Xue Wang, Haibin Wu, Xinmiao Zhou, Xiaoyu Yu, and Aili Wang Harbin University of Science and Technology, China Zhongshan Institute, China *Online Presentation*
17:10 – 17:30	**Intelligent Shrimp Monitoring System Based on YOLOv8 and Jetson Nano** *Siqi Yan*, Xinyu Liu, Haoran Lv, Xuxi Zhao, Miaomiao Liu, and Aili Wang Harbin University of Science and Technology, China China Academy of Information and Communications Technology, China *Online Presentation*
	Parallel Session
16:30 – 17:30	**Steering committee meeting on issues of 2025** At least one representative from each partner university should attend this meeting on time.
18:00 – 19:00	*Dinner*
From 19:30	**Ice breaking evening – Let us introduce our own countries** One can wear their national dress, bring their national snacks, can sing or dance, can show slides about their own country. Feel free to introduce your country to others and use the time to extend your academic network.

Conference fee includes: Lunches, dinners, coffee breaks, and publication.

Thursday	18.07.2024 | Day 2

From 07:00 — *Registration and Check In*

From 08:00 — *Breakfast*

Session 4: Computer Engineering I | Chair: Dr. Batbayar Battseren

09:00 – 09:30
Invited Talk
Surface Projection Enhancement and VR Technology Combined with MIS Image Reconstruction
Prof. Haibin Wu
Harbin University of Science and Technology, China

09:30 – 09:50
Predictive Learning Analytics Utilizing Formative Assessments and Recommender System for Study Success
Ummay Ubaida Shegupta, Md Shoriful Islam, and Wolfram Hardt
Chemnitz University of Technology, Germany

09:50 – 10:10
The Evaluation Result Based on the SURE model: Case of Samarkand Branch of TUIT
Ilkhom Boynazarov, *Uranchimeg Tudevdagva*, Gulnoza Safarova, and Robiya Raxmonova
Samarkand Branch of Tashkent University of Information Technologies, Uzbekistan
Chemnitz University of Technology, Germany

10:10 – 10:30
Neural Understanding of STEM Activities
Ryan Cho, Mobasshira Zaman, *Kyu Taek Cho,* and Jaejin Hwang
Illinois Mathematics and Science Academy, USA
Northern Illinois University, USA

Online Presentation

10:30 – 11:00 — *Coffee Break*

Session 5: Computer Engineering II | Chair: Paul Hubert Vossen

11:00 – 11:20
Measurement Models for Group-Peer Assessment of Project-Based Learning in Software Engineering
Paul Hubert Vossen and Suraj Ajit
SQUIRE Research Institute Niederstetten, Germany
University of Northampton, United Kingdom

11:20 – 11:40
Towards Vision Based Bi-Cycles Detection and an Autonomous Decision Making System for Driving Situation Awareness
Julkar Nine, Ayushkumar Mehta, *Sai Rohit Rajkumar,* and Wolfram Hardt
Chemnitz University of Technology, Germany

11:40 – 12:00
The Level of Digital Literacy Among Students in Uzbekistan: Assessing Skills and Perspectives
Nasibakhon Rasulova, Dilnoza Zaripova, Bahrixon Otaxonova, Feruza Zakirova, Gulnora Tashmukhamedova, and Yuliya Anufriyeva
Tashkent University of Information Technologies named after Muhammad al-Khwarizmi, Uzbekistan

12:00 – 12:20
Intelligent Food Identification System Using Improved YOLOv8
Francia Nitiavintokana, Md Abdur Rouf, Xiaoyu Yu, Haibin Wu, Aili Wang, and Yuji Iwahori
Harbin University of Science and Technology, China
Chubu University, Japan

Online Presentation

Thursday	18.07.2024	Day 2

12:20 – 14:00	*Lunch*

Session 6: Computer Engineering III | Chair: Prof. Zakirova Feruza Makhmudovna	

14:00 – 14:20	**Comparative Study for Monocular Depth Detection Models on Embedded Systems** Abeer Aly Moussa, *Shadi Saleh*, and Wolfram Hardt Chemnitz University of Technology, Germany

14:20 – 14:40	**Development of Pedagogical Creativity of Lecturers in Training Courses Through Innovative Methodological Projects: A Case of Uzbekistan** *Shahnoza Pozilova*, Djamshid Sultanov, Feruza Zakirova, Madina Zakirova, Adashboyev Shavkiddin, and Ibraymov Askar Tashkent University of Information Technologies named after Mukhammad al-Kharazmi, Uzbekistan

14:40 – 15:00	**A Study of Factors Predicting Students' University Academic Achievement** *Amartuvshin Amarzaya*, Jargalsaikhan Ankhbayar, and Mend Narantuya National University of Mongolia, Mongolia Mongolian University of Life Sciences, Mongolia *Online Presentation*

15:00 – 15:20	**Detection of Rice Sheath Blight Leaf Based on Improved YOLOV8 Algorithm** *Yuze Zhang*, Yuxuan Zhou, Hui Yang, Liming Jian, Fangyu Shi, and Aili Wang Harbin University of Science and Technology, China Harbin Verification and Testing Institute, China *Online Presentation*

15:20 – 15:40	*Coffee Break*

16:00 – 18:00	**Social event** Cruise at Senftenberger Lake

From 19:00	**Gala Dinner**

Friday	19.07.2024	Day 3

From 08:00	*Breakfast/Check-out*

Session 7: AI and Educational Technology | Chair: Dr. Shadi Saleh

09:00 – 09:50	Keynote Speech **Human Factors Challenges Resulting from Automation and Artificial Intelligence** *Dr.-Ing. Christoph Vernaleken* Deutsche Aircraft GmbH, Germany
09:50 – 10:10	**The Readiness Evaluation of University Ranking: Case of Mongolian University of Science and Technology** *Batdorj Davaagombo,* Ikhagvasuren Bayar-Erdene, Namnan Tumurpurev, and Narantsetseg Yadmaa Mongolian University of Science and Technology, Mongolia
10:10 – 10:30	**The Impact of Tutor Quality on E-learning Acceptance: A Mediating Effect of E-assessment in Public Universities of Malaysia** Muhammad Imran, Adnan Ul Haque, and *Eugene Kozlovski* Islamia University of Bahawalpur, Pakistan Yorkville University, Canada University of Exeter, UK
10:30 – 10:50	**Enhancing College Students' Critical Thinking Through Classroom News Literacy Intervention** *Swagata Ghosh,* Gajendra S. Chauhan, and Renu Kotwal Birla Institute of Technology & Science, India
10:50 – 11:10	**The ICT Competence Framework for Formal and Non-Formal Educational Training in Mongolia** Itgel Miyejav, Buyandelger Banzragch, *Lut-Ochir Vanganjil*, and Oyungoo Enkhbold Mongolian National Institute for Educational, Mongolia
11:10 – 11:30	**Subjective and Objective Evaluation of Mock Classes for Faculty Development** *Satori Hachisuka,* Kayoko Kurita, and Shinichi Warisawa The University of Tokyo, Japan
11:30 – 11:50	**Assessment of Higher Education Academic Program Outcomes and Improvement of Quality Assurance Criteria** *Omboosuren Bolorsaikhan,* Sugar Enkhtuvshin, and Uranchimeg Tudevdagva Mongolian National University of Medical Sciences, Mongolia Mongolian National University of Education, Mongolia Chemnitz University of Technology, Germany *Online Presentation*

11:50 – 12:30	**Certificates Handing Session**
From 12:30	*Lunch*
From 13:00	*Departure*