



ICCE 2024

32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Conference Program

Monday, 25 November 2024

Monday, 25 November 2024

09:00 to 10:30	<p>ECW: Early Career Workshop Session Chair: Chiu-Lin LAI</p> <p>ECW01: Can Use of Technologies help Reduce Biases in Academic Recruitment <i>Kashmira DAVE</i></p> <p>ECW02: Leveraging AI-Powered Virtual Meeting Summaries: Towards an Evidence-Based Classroom Observation Assessment <i>Arlene Mae CELESTIAL VALDERAMA</i></p> <p>Advisors Tzu-Chi YANG Assistant Professor, National Yang Ming Chiao Tung University Cheng-Huan CHEN Associate Professor, National Tsing Hua University Shao-Chen CHANG Assistant Professor, Yuan Ze University</p>	Doreen Black Box
	<p>W01-1: 4th International Workshop on Embodied Learning: Technology Design, Analytics & Practices Session Chair: Rwitajit MAJUMDAR</p> <p>W01-004F: Exploring Cognitive Engagement in AI-Driven Adaptive Psychomotor Sport Training <i>Miguel PORTAZ, Rwitajit MAJUMDAR & Olga C. SANTOS</i></p> <p>W01-005F: Exploring Graph Slopes Through a Series of Embodied Learning Experiences <i>Priyadharshni ELANGAIVENDAN, Melwina ALBUQUERQUE, Shizuka DARA & Sanjay CHANDRASEKHARAN</i></p>	The Loft
	<p>W03-1: Analysis and Design of Problems/Questions in the Digital Environment: The 17th Workshop on Technology Enhanced Learning by Posing/Solving Problems/Questions Session Chair: Yusuke HAYASHI</p> <p>W03-002: Question Generation Support System Using Others' Research Frames <i>Daiki MAEDA, Kota KUNORI & Tomoko KOJIRI</i></p> <p>W03-005: Learning Effectiveness and Reflections on AI Literacy in Junior High School Students with Game-Based Learning and Problem-Based Learning <i>Shih-Hua HUANG & Ting-Chia HSU</i></p> <p>W03-009: Does Experience of Feedback Generation Promote Student Novel Problem Posing? An Empirical Study in a Database Course <i>Kazuaki KOJIMA</i></p>	The Hive



ICCE 2024

32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Monday, 25 November 2024

09:00 to 10:30	<p>W08-1: The 12th Workshop on Technology-Enhanced STEM Education (TeSTEM Workshop)</p> <p>Session Chair: Pawat CHAIPIDECH</p> <p>W08-001F: Novice Programmers' Saccadic Patterns in Error Message Comprehension and Syntax Error Identification <i>Caren PACOL, Maria Mercedes RODRIGO & Christine Lourrine TABLATIN</i></p> <p>W08-004F: Challenges and Opportunities for Designing and Implementing Ubiquitous Game-Based Learning to Cultivate Digital Citizenship in Thailand <i>Patcharin PANJABUREE, Gwo-Jen HWANG, Niwat SRISAWASDI, Ungsinun INTARAKAMHANG & Sasipim POOMPIMOL</i></p> <p>W08-005S: Reducing Undergraduate Students' Information Technologies (ITs) Anxiety Through Implementation of Blended Learning: A Case Study in the Basic Natural Science Course <i>Anggiyani Ratnaningtyas Eka NUGRAHENI, Anggraeni Dian PERMATASARI & Antuni WIYARSI</i></p>	JJ Atencio Lighthouse
	<p>W09-1: The 4th Workshop on Innovative Technologies for Enhancing Interactions and Learning Motivation</p> <p>Session Chair: Jerry Chih-Yuan SUN</p> <p>W09-001S: AR²: Augmented Reality for Enhanced Reading Comprehension <i>Allan Jay ESTEBAN</i></p> <p>W09-002S: Developing the Interactive Game-Based Picture Book "Food Ninja" to Enhance Creativity in Elementary School Students <i>Wen Chun LAN, De Jun MO & Joni Tzuchen TANG</i></p> <p>W09-003F: An Estimation of Student Well-Being Using Experience Sampling <i>Arthur W. NEBRAO, Jr. & Maria Mercedes T. RODRIGO</i></p> <p>W09-004S: Exploring the Use of Short Video Social Media for Learning ESL in Indonesia <i>Riska SAPUTRA, Tsaqufal JALILIY & Intan SETIANI</i></p> <p>W09-005S: Narrative Introduction Text Generation Support System According to Reader Preferences <i>Ryusei SHIMONAKA, Kota KUNORI & Tomoko KOJIRI</i></p> <p>W09-007S: Galvanic Skin Responses and Flow: Insights from Multimodal Learning Analytics in Personal Learning Environment <i>Yu-Lin HO, Yuan-Hsuan LEE & Jiun-Yu WU</i></p>	Campos Interactive Teaching Lab
10:30 to 10:50	<p>Coffee / Tea Break</p> <p>Food Service Station: The Loft</p> <p>Dining Area: The Loft, The Hive, JJ Atencio Lighthouse</p>	The Loft

**ICCE 2024**32nd International Conference
on Computers in Education
MANILA, PHILIPPINES**Monday, 25 November 2024**

10:50 to 12:20	<p>W01-2: 4th International Workshop on Embodied Learning: Technology Design, Analytics & Practices Session Chair: Jayakrishnan M. WARRIEM</p> <p>W01-006F: Unpacking Interaction Markers of Critical Thinking <i>Aditi KOTHİYAL, Rwitajit MAJUMDAR, Shitanshu MISHRA, Jayakrishnan Madathil WARRIEM & Prajakt PANDE</i></p> <p>W01-007F: Actions and Interactions at Collaborative Engineering Design Hackathon: Looking Through the Lens of Embodied Cognition <i>Soumya NARAYANAN, Navneet KAUR & Rwitajit MAJUMDAR</i></p> <p>W01-008F: Designing an AI-Enhanced Timeline for Monitoring Multimodal Interactions in Embodied Learning Environments <i>Joyce FONTELES, Namrata SRIVASTAVA, Eduardo DAVALOS, Ashwin T S & Gautam BISWAS</i></p>	The Loft
	<p>W03-2: Analysis and Design of Problems/Questions in the Digital Environment: The 17th Workshop on Technology Enhanced Learning by Posing/Solving Problems/Questions Session Chair: Shitanshu MISHRA</p> <p>W03-004: Difficulty-Controllable Reading Comprehension Question Generation Considering the Difficulty of Reading Passages <i>Yuto TOMIKAWA & Masaki UTO</i></p> <p>W03-006: Iterative Problem Solving in the Integration of Design Thinking and Game-Based Learning into Enhancing Computational Thinking and AI Literacy <i>Tai-Ping HSU & Ting-Chia HSU</i></p> <p>W03-007: Design and Development of a Stepwise Learning Environment for Problem Posing of Arithmetic Word Problem <i>Yusuke HAYASHI, Nagito YAMAMOTO, Susumu SHIMAKAWA & Tsukasa HIRASHIMA</i></p>	The Hive
	<p>W08-2: The 12th Workshop on Technology-Enhanced STEM Education (TeSTEM Workshop) Session Chair: Pawat CHAIPIDECH</p> <p>W08-002F: Predicting Emotional Impact on Peer Review, Peer Assessment, and Self Assessments Using Deep Learning and NLP in STEM Education <i>Pascal Muam MAH</i></p> <p>W08-008F: Leveraging Generative AI for Automatic Scoring in Chemistry Education: A Web Based Approach to Assessing Conceptual Understanding of Colligative Properties <i>Sri YAMTINAH, Dimas Gilang RAMADHANI, Antuni WIYARSI, Hayuni Retno WIDARTI & Ari Syahidul SHIDIQ</i></p> <p>W08-010S: Fostering TPACK Self Efficacy Among Pre-Service Chemistry Teachers: A Case Study from Indonesia <i>Anggiyani Ratnaningtyas Eka NUGRAHENI & Niwat SRISAWASDI</i></p>	JJ Atencio Lighthouse

**ICCE 2024**32nd International Conference
on Computers in Education
MANILA, PHILIPPINES**Monday, 25 November 2024**

10:50 to 12:20	<p>W09-2: The 4th Workshop on Innovative Technologies for Enhancing Interactions and Learning Motivation <i>Session Chair: Tzu-Chi YANG</i></p> <p>W09-006F: Transforming Student Feedback into Institutional Action Plans: A Data-Driven Approach <i>Arlene Mae CELESTIAL VALDERAMA</i></p> <p>W09-008F: BioMol DigiGames: An App for the Mastery of Biomolecules <i>Joshua TUMOLVA, Armando Victor GUIDOTE, John Lorence VILLAMIN & Joselito Christian Paulus VILLANUEVA</i></p> <p>W09-009S: The Era of Learning Programming Through Program: Challenges and Potential of ChatGPT in Revolutionizing High School Programming Education <i>Tzu-Chi YANG</i></p> <p>W09-010S: Code Visualization System for Writing Better Code Through Trial and Error in Programming Learning: Classroom Implementation and Practice <i>Shintaro MAEDA, Kento KOIKE & Takahito TOMOTO</i></p> <p>W09-011S: Optimization of Non-Verbal Information for English Conversation Agents Using Interactive Evolutionary Computation <i>Yuma SHIMOSAKA, Emmanuel AYEDOUN & Masataka TOKUMARU</i></p>	Campos Interactive Teaching Lab
12:20 to 13:20	<p>Lunch</p> <p>Food Service Station: The Loft</p> <p>Dining Area: The Loft, The Hive, JJ Atencio Lighthouse</p>	The Loft
13:20 to 17:00	<p>IE01: Interactive Event-1</p> <p>Educ-AI-tion: Bridging Divides with Educational GenAI <i>Ahmad Salahuddin Mohd Harithuddin, Nurul Amelina NASHARUDDIN, Nur Aira Abd Rahim, & Mas Nida Md Khambari</i> Universiti Putra Malaysia, Malaysia</p>	The Loft
	<p>IE02: Interactive Event-2</p> <p>Improving Learning through Information Organization Using Kit-Build Concept Map <i>Rian FITRIANSYAH & Lintang Matahari HASANI</i> Hiroshima University, Japan</p>	Doreen Black Box
	<p>TU01: Tutorial 1</p> <p>Leveraging Deep NLP for Agentic LLM Use in Teaching and Learning <i>Michelle BANAWAN</i> Asian Institute of Management, Philippines</p>	The Hive

**ICCE 2024**32nd International Conference
on Computers in Education
MANILA, PHILIPPINES**Monday, 25 November 2024**

13:20 to 17:00	<p>W08-3: The 12th Workshop on Technology-Enhanced STEM Education (TeSTEM Workshop)</p> <p>Session Chair: Anggiyani Ratnaningtyas Eka NUGRAHENI</p> <p>W08-003F: Math Learning Application on Mobile Devices Following the STEAM Educational Model <i>Nguyen-Manh THANG & Pham-Duc THO</i></p> <p>W08-011F: Does Interactive Augmented Reality Enhance Primary Students' Geometric Understanding and Visual-Spatial Skills in Mathematics Learning? <i>Atcharaporn ASSAWAPHUM, Sasivimol PREMTHAISONG & Pawat CHAIPIDECH</i></p> <p>W08-007S: Promoting Quantitative Analysis in School Chemistry with Technology-Supported Hands-On Laboratory Learning: A Case of Arduino-Based Portable Spectrophotometer <i>Ari Syahidul SHIDIQ, Fa'ari SALSABILLA, Sri YAMTINAH, Sri MULYANI, Murni RAMLI, Hayuni Retno WIDARTI & Nahadi</i></p>	JJ Atencio Lighthouse
	<p>W09-3: The 4th Workshop on Innovative Technologies for Enhancing Interactions and Learning Motivation</p> <p>Session Chair: Yanjie SONG</p> <p>W09-012S: Exploring the Benefits of Strategic Hesitations in Language Learning Robots <i>Ryusei AZUMA, Emmanuel AYEDOUN & Masataka TOKUMARU</i></p> <p>W09-013S: Zooming In on Educator Well-Being: Exploring Behavior Attributes, Zoom Fatigue, and Burnout Dynamics <i>Kevynn DELGADO, Mary Rose MARTINEZ, Christine Jamela VALSADO & Ryan EBARDO</i></p> <p>W09-014S: The Effect of Collaborative Anchoring on the Development of Digital Curation Skills Among Nursing College Students <i>Chun-Hao CHANG</i></p> <p>W09-015F: Enhancing Health Education and Learning Motivation in Primary Students Through Augmented Reality and Game-Based Learning: A Case Study <i>Nattapat BUNYUEN, Sasivimol PREMTHAISONG & Pawat CHAIPIDECH</i></p> <p>W09-016S: Improving Engagement in Museums Through Virtual Reality Educational Escape Rooms (VREER): A Framework and Usability Study <i>Eric Cesar E. VIDAL Jr., Nicko R. CALUYA, Joan Dominique L. LEE, Kenneth King L. KO, Jed Laszlo O. JOCSON & Gerick Jeremiah Niño N. GO</i></p> <p>W09-017S: Explore the Effect of Metacognitive Awareness on University Students' Learning Outcomes in the Metaverse: Evidence from Eye-Tracking Data <i>Tinghui WU, Yanjie SONG & Xuesong ZHAI</i></p>	Campos Interactive Teaching Lab
14:50 to 15:10	<p>Coffee / Tea Break</p> <p>Food Service Station: The Loft</p> <p>Dining Area: The Loft, The Hive, JJ Atencio Lighthouse</p>	The Loft



ICCE 2024

32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Monday, 25 November 2024

15:10
to
17:00

W08-4: The 12th Workshop on Technology-Enhanced STEM Education
(TeSTEM Workshop)

Session Chair: Anggiyani Ratnaningtyas Eka NUGRAHENI

W08-009F: The Urgency of Small-Scale Laboratory Learning Media with
Ethno-Electrochemical Contexts Based on Content Creators

*Hayuni R. WIDARTI, Sumari, Munzil, Nahadi, Ari S. SHIDIQ,
Berliyana I. PANULATSIH, Ghaitza Z. S. P. PUTRI, Nafisah KHAIRUNNISA &
Deni A. ROKHIM*

W08-012F: Exploring the Effect of Marker-Based AR Gamification on
Primary Students' Science Concepts and Motivation

*Pawat CHAIPIDECH, Sasivimol PREMTHAISONG, Phattaraporn PONDEE &
Niwat SRISAWASDI*

W08-006S: Exploring the Impact of Digital Divide on the Academic
Performance of STEM Students in Hybrid Modality

May Marie P. TALANDRON-FELIPE & Jundy V. INTAO

JJ Atencio
Lighthouse



ICCE 2024

32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Conference Program

Tuesday, 26 November 2024

Tuesday, 26 November 2024

09:00
to
10:30

W02-1: The 13th International Workshop on ICT Trends in Emerging Economies (WICTTEE 2024)

Session Chair: Ryan EBARDO

W02-003F: Exploring Learning Analytics: A Case Study of Tertiary Educators' Utilization and Integration of AnimoSpace LMS in the Online Learning Environment

Rozanne Tuesday G. FLORES & Ethel C. ONG

W02-007F: An Implementation of Augmented Reality in Guided Inquiry-Based Learning for Enhancing Primary Students' Mental Models in Science

Sasivimol PREMTHAISONG, Pawat CHAIPIDECH, Phattaraporn PONDEE & Niwat SRISAWASDI

W02-001S: Design and Assessment of a Mobile Cloud Learning Platform for the Classroom: Examining the Efficiency of Blended Learning in Post-COVID Science Education

Joselito Christian Paulus VILLANUEVA, John Lorence VILLAMIN & Joshua TUMOLVA

Doreen Black
Box

DSC-1: Doctoral Student Consortium

Session Chair: Feng LIN

244: Real-Time Adaptive Learning Environments Using Gaze and Emotion Recognition Engagement and Learning Outcomes

Aboul Hassane CISSE

254: Developing a Multimodal Learning Analytics Approach for Collaborative Learning and Metacognitive Strategies in Virtual Learning Environments for Primary Science Education

Lei TAO & Yanjie SONG

223: Competition and Collaboration: A Multi-Modal Analysis of Cognitive Load and Behavior Patterns in Game-Based Learning

Lishan ZHENG & Wenli CHEN

The Loft

W04-1: The 8th Computer-Supported Personalized and Collaborative Learning

Session Chair: Cheng-Huan CHEN

W04-007F: Investigating the Role of AI Book Talk Companion in Enhancing Student Performance: A Pilot Study on Self-Efficacy

Yi-Cheng TSAI, Hsiao-Tung YANG, Chang-Yen LIAO, Yen-Cheng YEH & Tak-Wai CHAN

W04-008F: Investigating Students' Online Learning Perception Through the Lens of Constructivism

May Marie P. TALANDRON-FELIPE, Kent Levi A. BONIFACIO & Gladys S. AYUNAR

W04-001S: Integrating Virtual Environment in Teaching Courses

Chiu-Jung CHEN & Pei-Lin LIU

The Hive



ICCE 2024

32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Tuesday, 26 November 2024

09:00 to 10:30	<p>W06-1: GenAI in Education – From Hallucinations to Reality: Integrating Learning Analytics and Generative AI for Enhancing Personalized Learning Experiences Session Chair: Yiling DAI</p> <p>W06-001F: Analyzing Teacher–Student Dialogues in Online One-on-One Primary Mathematics Tutoring: A Lag Sequential Analysis of Group Differences <i>Gary CHENG, Bo JIANG, Daner SUN, Ming GAO & Zhixuan SONG</i></p> <p>W06-004F: Supporting Teacher–Student Book Talk and Book Wish Lists with AI-Driven Technology <i>Chih-En KUO, Hong-Min TU, Chang-Yen LIAO & Tak-Wai CHAN</i></p> <p>W06-005F: AVERY: A GenAI-Based Approach to Enhancing Learner Engagement in English Writing <i>Ka-Lai WONG, Patrick OCHEJA, Brendan FLANAGAN & Hiroaki OGATA</i></p>	JJ Atencio Lighthouse
	<p>W07-1: The 7th Workshop on Predicting Performance Based on the Analysis of Reading and Learning Behavior</p> <p>W07-001F: Exploring Cross-Disciplinary Education: Enhancing Science Learning with Digital Picture Books <i>Yan-Yu JAU & Joni Tzuchen TANG</i></p> <p>W07-002F: Methods of Balancing Model Explainability and Performance in Identifying At-Risk Students <i>Tiffany T.Y. HSU, Brendan FLANAGAN & Owen H.T. LU</i></p>	Campos Interactive Teaching Lab
10:30 to 10:50	<p>Coffee / Tea Break</p> <p>Food Service Station: The Loft</p> <p>Dining Area: The Loft, The Hive, JJ Atencio Lighthouse</p>	The Loft
10:50 to 12:20	<p>W02-2: The 13th International Workshop on ICT Trends in Emerging Economies (WICTTEE 2024) Session Chair: Ryan EBARDO</p> <p>W02-014F: Exploring Skills Enhancement in Student Teacher Through Implementation of Design Thinking in Unplugged Game Creation <i>Tian Wong LING, Mas Nida Md. KHAMBARI, Mohd Mokhtar MUHAMAD, Sharifah Intan Sharina Syed-ABDULLAH & Saiful Hasley RAMLI</i></p> <p>W02-017F: Factors Influencing ChatGPT Use Behaviour Among Trainee Teachers <i>Sarala VALAIDUM & Jazihan MAHAT</i></p> <p>W02-009S: Design and Implementation of an Educational Escape Rooms Class <i>Jesus Alvaro C. PATO, Gerick Jeremiah Niño N. GO, Paolo Santino P. CAOILE, Gio Gabriel C. REYES, Joaquin Enrique B. SINJIAN, Jerold Luther P. AQUINO & Maria Mercedes T. RODRIGO</i></p>	Doreen Black Box



ICCE 2024

32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Tuesday, 26 November 2024

10:50 to 12:20	<p>DSC-2: Doctoral Student Consortium Session Chair: Alwyn Vwen Yen LEE</p> <p>253: A Proposal for a Quantitative Evaluation Model for Error Image Generation in L2 Vocabulary Learning <i>Kazuki SUGITA, Wen GU, Koichi OTA, Prarinya SIRITANAWAN & Shinobu HASEGAWA</i></p> <p>212: Development and Validation of a Problem-Solving Instrument (Multiple-Choice Questions) for Computational Thinking Among Trainee Teachers in the Klang Valley, Malaysia <i>Ahmad Sarji Abdul Hamed, Su Luan WONG & Mohd Zariat Abdul Rani</i></p> <p>217: OKLM: Open Knowledge and Learner Model Using Educational Big Data <i>Kensuke TAKII, Changhao LIANG & Hiroaki OGATA</i></p>	The Loft
	<p>W04-2: The 8th Computer-Supported Personalized and Collaborative Learning Session Chair: Chin-Jung CHEN</p> <p>W04-013F: Investigation of Skills Training System Using TF-IDF for the Plasterer's Skeletal Data <i>Ryota TANAKA, Naka GOTODA, Lee SAERON, Ryo KANDA, Ayaka HUNABIKI, Hirotake KANISAWA, Kanae KANDA, Yuka TAKAI & Toshihiro HAYASHI</i></p> <p>W04-002S: The Trends in Computer-Supported Virtual Reality Collaborative Learning <i>Ching-Yi CHANG & Cheng-Huan CHEN</i></p> <p>W04-003F: Investigating the Impact of Cooperative Group Learning on Blended Teaching and Learning Outcomes: A Case Study of Sixth-Grade Students in an Elementary School <i>De Jun MO & Joni Tzuchen TANG</i></p>	The Hive
	<p>W06-2: GenAI in Education - From Hallucinations to Reality: Integrating Learning Analytics and Generative AI for Enhancing Personalized Learning Experiences Session Chair: Patrick OCHEJA</p> <p>Panel Discussion</p>	JJ Atencio Lighthouse
	<p>W07-2: The 7th Workshop on Predicting Performance Based on the Analysis of Reading and Learning Behavior</p> <p>W07-003F: Effects of the Self-Regulated Learning and Motivation on Learning Achievements of the Programming Courses <i>Mu-Sheng CHEN & Ting-Chia HSU</i></p> <p>W07-004F: GazeViz: A Web-Based Approach for Visualizing Learner Gaze Patterns in Online Educational Environment <i>Eduardo DAVALOS, Namrata SRIVASTAVA, Yike ZHANG, Amanda GOODWIN & Gautam BISWAS</i></p>	Campos Interactive Teaching Lab
12:20 to 13:20	<p>Lunch</p> <p>Food Service Station: The Loft</p> <p>Dining Area: The Loft, The Hive, JJ Atencio Lighthouse</p>	The Loft



ICCE 2024

32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Tuesday, 26 November 2024

13:20 to 14:50	<p>W02-3: The 13th International Workshop on ICT Trends in Emerging Economies (WICTTEE 2024) <i>Session Chair: John Byron TUAZON</i></p> <p>W02-002S: A Preliminary Investigation of the Definition and Components of Computational Thinking in the Malaysian Education Landscape: From Educational Technology Experts' Perspective <i>Ahmad Sarji Abdul HAMED, Su Luan WONG, Mohd Zariat Abdul Rani, Mas Nida Md KHAMBAR, Nur Aira Abd RAHIM, Fariza KHALID & Priscilla MOSES</i></p> <p>W02-006S: PERS: A Personalized Recommender System for Student-Generated Questions in Programming Courses <i>Pham-Duc THO</i></p> <p>W02-010S: A User Acceptance Testing Tool for Mobile Game-Based Learning Application <i>Christian Jade D. GUILLEN & Saturnina F. NISPEROS</i></p> <p>W02-016S: Sociotechnical Challenges of Older Educators in Delivering Medical Education Online <i>Ryan EBARDO, John Byron TUAZON & Miriam Louella FERMIN</i></p>	Doreen Black Box
	<p>DSC-3: Doctoral Student Consortium <i>Session Chair: Feng LIN</i></p> <p>248: Exploring the Young Learners' Interactions with AI-Generated Multimodal Feedback in Collaborative Writing <i>Xinyu GUO</i></p> <p>241: The Bane of AI in Teaching: Innovation Resistance in Higher Education Instructional Design & Delivery <i>Estefanie BERTUMEN & Ethel ONG</i></p> <p>Discussion</p>	The Loft
	<p>W04-3: The 8th Computer-Supported Personalized and Collaborative Learning <i>Session Chair: Jonathan Y. CHIN</i></p> <p>W04-012F: Addressing Public Speaking Anxiety with an AI Speech Coach <i>Frederick Voltair GARCIA Jr., Nicanor Froilan PASCUAL, Miguel Elijah SYBINGCO & Ethel ONG</i></p> <p>W04-005S: Exploring the Impact of Integrating Auto-Photography and Imagery Strategies into Computer-Supported Collaborative Learning: A Case Study in a General Education Course on Climate Change <i>Wen-Lung HUANG & Chia-Jung CHANG</i></p> <p>W04-010S: Developing an LLM-Empowered Agent to Enhance Student Collaborative Learning Through Group Discussion <i>Sixu AN, Yicong LI, Yu YANG, Yunsi MA, Gary CHENG & Guandong XU</i></p>	The Hive



ICCE 2024

32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Tuesday, 26 November 2024

13:20 to 14:50	<p>W06-3: GenAI in Education – From Hallucinations to Reality: Integrating Learning Analytics and Generative AI for Enhancing Personalized Learning Experiences Session Chair: Tzu-Chi YANG</p> <p>W06-007F: How AI Supports Returning Adult Learners in a Developing Economy: Enhancing Academic Writing Through Self-Determination Theory <i>Mary Rose MARTINEZ & Ryan EBARDO</i></p> <p>W06-009F: Developing a Multimodal Learning Analytics Approach to Examine Students' Cognitive Presence and Metacognition in a Metaverse Environment <i>Yanjie SONG, Lei TAO, Hao DENG & Jiachen FU</i></p> <p>W06-010F: Integrating ChatGPT into Flipped Learning: Enhancing Students' Creative Writing Skills and Perception <i>Worapong KHUIBUT, Sasivimol PREMTHAISONG & Pawat CHAIPIDECH</i></p>	JJ Atencio Lighthouse
13:20 to 17:00	<p>SW: Student Wing Chair: <i>Yanjie SONG</i>, The Education University of Hong Kong</p> <p>Introduction Topic: Get Your Research Published: Essential Tools and Strategies <i>Yin YANG</i>, The Education University of Hong Kong</p> <p>Q&A Session Topic: Unlock Your Early Career Success: Tips and Opportunities for Securing Grants <i>Shurui BAI</i>, The Education University of Hong Kong</p> <p>Q&A Session Interactive Session Closing</p>	Campos Interactive Teaching Lab
	<p>TU02: Tutorial 2 Designing Learning Experiences for Science, Technology, Engineering and Mathematics (STEM) Education using Minecraft <i>Dominique Marie Antoinette MANAHAN & Louise Marie TULAYBA</i> Ateneo de Manila University, Philippines</p>	Assemble at Ubuntu Space
14:50 to 15:10	<p>Coffee / Tea Break Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse</p>	The Loft

**ICCE 2024**32nd International Conference
on Computers in Education
MANILA, PHILIPPINES**Tuesday, 26 November 2024**

15:10 to 17:00	<p>W02-4: The 13th International Workshop on ICT Trends in Emerging Economies (WICTTEE 2024) <i>Session Chair: Ryan EBARDO</i></p> <p>W02-013S: Minecraft as a Tool for Digital Game-Based Learning: Enhancing Conceptual Understanding and Attitudes in Mathematics Learning <i>Sakda CHALEEPLIAM, Sasivimol PREMTHAISONG & Pawat CHAIPIDECH</i></p> <p>W02-008S: Cognicraft: Smart Exam Question Generation with AI and Bloom's Taxonomy <i>Christian SAGADRACA, Zainal SANTOS, Danilo SIMON Jr., Marianne Jessica TOLENTINO & Reymar VENTURA</i></p> <p>W02-004S: Development and Evaluation of a Hybrid Mobile-Learning App Using Design Science Research (DSR) Framework <i>John Lorence VILLAMIN, Joselito Christian Paulus VILLANUEVA & Joshua TUMOLVA</i></p>	Doreen Black Box
	<p>DSC: Doctoral Student Consortium Discussion</p>	The Loft
	<p>W04-4: The 8th Computer-Supported Personalized and Collaborative Learning <i>Session Chair: Chia-Jung CHANG</i></p> <p>W04-006S: Exploring the Effect of Collaborative Programming Learning Environment on Student's Computer Programming Competencies and Cognitive Learning <i>Chia-Jung CHANG & Wen-Lung HUANG</i></p> <p>W04-009S: Investigating the Impact of Kahoot! On EFL Grammar Learning <i>Jonathan Y. CHIN & Ben CHANG</i></p> <p>W04-011S: Designing an LLM-Based Dialogue Tutoring System for Novice Programming <i>Julieto PEREZ & Ethel ONG</i></p>	The Hive
	<p>W06-4: GenAI in Education – From Hallucinations to Reality: Integrating Learning Analytics and Generative AI for Enhancing Personalized Learning Experiences <i>Session Chair: Owen LU</i></p> <p>W06-011F: Competency-Based Assessment in the Era of Generative Artificial Intelligence: Perspectives of Selected STEM Educators <i>Friday Joseph AGBO, Heather Kitada SMALLEY & Kathryn NYMAN</i></p> <p>W06-006S: A Case Study for Educators with ChatGPT and Plato's Allegory of the Cave <i>Anna Y.Q. HUANG, Jain-Wei TZENG, Chi-Sheng HUANG, Zhi-Qi LIU, Bryan Carl TANUJAYA & Owen H.Q. LU</i></p> <p>W06-008S: Supporting Students' Post-Exam Reflection Needs in College Automation Engineering Course Using LLM <i>Edward ANOLIEFO, Patrick OCHEJA, Regina OCHONU, Brendan FLANAGAN & Hiroaki OGATA</i></p>	JJ Atencio Lighthouse
17:00 to 19:30	Welcome Reception	Ubuntu Space

**ICCE 2024**32nd International Conference
on Computers in Education**MANILA, PHILIPPINES**

Conference Program

Wednesday, 27 November 2024

C1: AIED/ITS

C2: CSCL

C3: ALT

C4: TEML

C5: EGG

C6: TELL

C7: PTP

BOPN Best Overall Paper Award Nominee

BSPN Best Student Paper Award Nominee

BTDPN Best Technical Design Paper Award Nominee

F Full Paper (20 minutes presentation + 5 minutes Q&A)

S Short Paper (10 minutes presentation + 5 minutes Q&A)

ES Extended Summary (9 minutes presentation + 5 minutes Q&A)

Wednesday, 27 November 2024

09:00 to 10:00	Opening Ceremony	Hyundai Hall
10:00 to 10:20	Coffee / Tea Break Food Service Station & Dining Area: Ubuntu Space Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft & Ubuntu Space
10:20 to 11:20	Keynote Speech: Dragan GAŠEVIĆ Getting Ready for the Age of AI: Developing Self-Regulated Learners Session Chair: Jon MASON	Hyundai Hall
11:20 to 12:20	Panel-3 Learning Languages in "Smarter" Ways: Theory-Informed Utilization of Smart Technologies in Contextualized, Authentic & Communicative Language Learning <i>Lung-Hsiang WONG, Yun WEN, Vivian Wen-Chi WU, Yoshiko GODA & Ting-Chia HSU</i>	Hyundai Hall
	ALT-1 Session Chair: Ashwin T. S. 64F: Proficiency Modeling in Junior High Math: Adapted Cognitive Statistical Models to E-Book Learning Contexts <i>Changhao LIANG, Kensuke TAKII & Hiroaki OGATA</i> 98F: An Embodied Projection Recognition System for Situated Learning to Enhance Learning Effectiveness and Self-Reflection Ability <i>Hui-Ting LIU, Zi-Ting DING, Su-Hang YANG, Jian-Yu WU, Jen-Hang WANG, Po-Yao CHAO, Yung-Yu ZHUANG & Gwo-Dong CHEN</i>	Doreen Black Box
	TEML-1 Session Chair: Ivica BOTICKI 71F BSPN: Linking Real-World Experiences with Course Contents: A Text Mining Approach Toward Effective "There and Back Again" <i>Manabu ISHIHARA, Izumi HORIKOSHI & Hiroaki OGATA</i> 75F BTDPN: Marrying Physical and Virtual Realms: An Embodied, Multi-Modal Approach to Situational Learning in Digital Reality <i>Vando Gusti AL HAKIM, Yao-En CHEN, Meng-Heng LIN, Chia-Ying CHANG, Jen-Hang WANG, Chih-Kai CHANG, YungYu ZHUANG, Su-Hang YANG & Gwo-Dong CHEN</i>	The Loft

**ICCE 2024**32nd International Conference
on Computers in Education
MANILA, PHILIPPINES**Wednesday, 27 November 2024**

11:20 to 12:20	AIED/ITS-1 <i>Session Chair: Brendan FLANAGAN</i> 58F BSPN: The Impact of Instructional Videos Supported by AI-Driven Tutoring System on EFL Listening and Speaking <i>Xiangyu TAN & Xiuyuan ZUO</i> 137F: LLM-Generated Personalized Analogies to Foster AI Literacy in Adult Novices <i>Cassie Chen CAO, Eason CHEN, Zoe FANG, Lydia Y CAO, Jionghao LIN & Ruizhe LI</i>	The Hive
	PTP-1 <i>Session Chair: Sahana MURTHY</i> 24F: Do Academic Stress and Risk Propensity Affect Behavioral Intention to Use ChatGPT Among University Students? <i>Brylle SAMSON, Ronnie LURIAGA & Ryan EBARDO</i> 53F: Who Is a Good Computational Thinker? Mapping Behavioral Dispositions of Middle-School Children Based on Real-Life, Algorithmic Tasks <i>Shashaank V. PINNAMARAJU, Lazar TONY & Anveshna SRIVASTAVA</i>	JJ Atencio Lighthouse
	International Program Committee (IPC) Meeting (open meeting) All program committee members are welcome to attend this meeting	Campos Interactive Teaching Lab
12:20 to 13:20	Lunch Food Service Station & Dining Area: Ubuntu Space Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft & Ubuntu Space
13:20 to 14:00	Theme-Based Invited Speech <i>Session Chair: Yun WEN</i> How to Better Understand the Collaborative Component in Computer-Supported Collaborative Learning (CSCL): Current Landscape, Challenges and Future Prospects <i>Johanna PÖYSÄ-TARHONEN</i>	Hyundai Hall
14:00 to 15:00	ALT-2 <i>Session Chair: Shinobu HASEGAWA</i> 196F BOPN: Combining Multimodal Analyses of Students' Emotional and Cognitive States to Understand Their Learning Behaviors <i>Ashwin T S, Caitlin SNYDER, Celestine E. AKPANOKO, Srigowri M P & Gautam BISWAS</i> 136S: Development of Metacognitive Reflection Support System on Creative Discussion <i>Toshimasa SHIMIZU, Yuki HAYASHI & Kazuhisa SETA</i> 149S: Utilization of Japanese Public Educational Data by Retrieval Augmented Generation for Policy Research <i>Kyosuke TAKAMI</i>	Doreen Black Box
	Meet the APSCE Executive Committee	The Loft

**ICCE 2024**32nd International Conference
on Computers in Education
MANILA, PHILIPPINES**Wednesday, 27 November 2024**

14:00 to 15:00	AIED/ITS-2 Session Chair: Maria Mercedes T. RODRIGO 13S: UniSpLLM: An Integrated Approach for Enhancing Reasoning and Education with Large Language Models <i>Hanyu ZHAO, Yuzhuo WU, Yang YU, Xiaohua YU & Liangyu CHEN</i> 106S: Availability and Effectiveness of Generative AI for Web-Based Investigative Learning <i>Yutaka WATANABE & Akihiro KASHIHARA</i> 122S: Developing a LLMs-Driven System Based on Human-AI Progressive Code Generation Framework to Assist Mathematics Learning <i>Chun Yan Enoch SIT, Yin YANG, Wing Kei YEUNG & Siu Cheung KONG</i>	The Hive
	TELL-1 Session Chair: Brendan FLANAGAN 123F BSPN: TAMMY: Supporting EFL Translation Practice with an LLM-Powered Chatbot <i>Steve WOOLLASTON, Brendan FLANAGAN, Patrick OCHEJA, Yiling DAI & Hiroaki OGATA</i> 172F BTDPN: Impact of Online Video Dubbing Activities on Grade 5 Students' Pronunciation, Accuracy, and Fluency in English Speaking: An Experimental Research <i>Min XIE & Alex Wing Cheung TSE</i>	JJ Atencio Lighthouse
	CSCL-1 Session Chair: Cheng-Huan CHEN 31F: Unveiling the Interplay of Students' Epistemic Emotions and Knowledge Building Activities in Design Studios <i>Alwyn Vwen Yen LEE, Chew Lee TEO, Aloysius ONG & Katherine YUAN</i> 144F BOPN, BSPN: MESHing Minds: Bridging the Gap Between Creativity and IoT Programming Through Collaborative Mixed Reality <i>Yusuke SAKABE, Emmanuel AYEDOUN & Masataka TOKUMARU</i>	Campos Interactive Teaching Lab
15:00 to 15:20	Coffee / Tea Break Food Service Station & Dining Area: Ubuntu Space Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft & Ubuntu Space
15:20 to 16:50	Panel-2 Global Harwell in an Examination Driven Education System and an Excellence Pursuing Society: Possible? How? Better with Digital Technologies <i>Fu-Yun YU, Tak-Wai CHAN, Sahana MURTHY, Su Luan WONG, Wenli CHEN, Hyo-Jeong SO & Hiroaki OGATA</i>	Hyundai Hall



ICCE 2024

32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Wednesday, 27 November 2024

15:20 to 16:50	<p>ALT-3 <i>Session Chair: Ashwin T. S.</i></p> <p>97F: Analyzing Student Behavior in Viat-Map: Steps and Time as Performance Indicators <i>Banni Satria ANDOKO, Vivin Ayu LESTARI, Agung Nugroho PRAMUDHITA, Amalia NURAINI, Inda Khoirun NISAK & Tsukasa HIRASHIMA</i></p> <p>113F: Comparison of Learners' Self-Direction Behavior Across Contexts and Phases <i>Junya ATAKE, Chia-Yu HSU, Huiyong LI, Izumi HORIKOSHI, Rwitajit MAJUMDAR & Hiroaki OGATA</i></p> <p>131S: Progressive Behavior Patterns of Online Discussion at Different Circle of Self-Regulated Learning <i>Shih-Hua HUANG, De-Yu SHIAU, Yung-Sian FANG & Ting-Chia HSU</i></p> <p>143S: Forest/CR: Critical Paper Reading Support System <i>Tomoya KII, Kazuhisa SETA & Yuki HAYASHI</i></p>	Doreen Black Box
	<p>EGG-1 <i>Session Chair: Hyo-Jeong SO</i></p> <p>16F BSPN: Design and Evaluation of the Usability of a Game-Based Learning Application for Learners with Dyslexia <i>Vincent GARCIA, Arnel OCAY, Joshua PERADILLA, Mary Rose SAGUIPED & Myla Karen ARENAS</i></p> <p>72F: Comparing Effects of Adaptive Gamification and One-Size-Fits-All Gamification on Students' Task Completion Process and Learning Performance <i>Shurui BAI & Yingxue LIU</i></p> <p>162F BOPN: Dialogue Game-Based Learning for AI Ethics Education <i>Hyo-Jeong SO & Sung-Eun KIM</i></p> <p>125S: Detecting Off-Task Behavior of Learners in Minecraft Using Exploration and Personalized Features <i>Maricel A. ESCLAMADO & Maria Mercedes T. RODRIGO</i></p>	The Loft
	<p>AIED/ITS-3 <i>Session Chair: May Marie TALANDRON-FELIPE</i></p> <p>175F: Evaluating the Performance of Copula-Based Item Response Theory Models for Interpretable Assessment <i>Eduardo GUZMÁN & Eva MILLÁN</i></p> <p>80S: Enhancing Diversity in Difficulty-Controllable Question Generation for Reading Comprehension via Extended T5 <i>Teruyoshi GOTO, Yuto TOMIKAWA & Masaki UTO</i></p> <p>190S: The Effect of Feature Reliability on the Generalization of Machine Learning Models in Educational Data <i>Yingbin ZHANG</i></p> <p>258ES: Exploring High School Students' Transition from Traditional Search Engines to ChatGPT for Course Learning: A Push-Pull-Mooring Model Perspective <i>Chien-Liang LIN, Chih-Yu YANG, Pei-Chi WU, Yu-Cheng LIN & Chi-Heng LI</i></p> <p>266ES: Exploring Dialogue Patterns in Argumentation with Pre-Set ChatGPT Personas <i>Seunmin EUN & Seonmin JIN</i></p>	The Hive

**ICCE 2024**32nd International Conference
on Computers in Education
MANILA, PHILIPPINES**Wednesday, 27 November 2024**

15:20 to 16:50	PTP-2 Session Chair: Jayakrishnan WARRIEM 61F BOPN: Representing Learning Progression of Unguided Exercise Solving: A Generalization of Wheel-Spinning Detection <i>Taisei YAMAUCHI, H. Ulrich HOPPE, Yiling DAI, Brendan FLANAGAN & Hiroaki OGATA</i> 6S: Factors Contributing to the Negative Online Learning Academic Self-Concept of College Students <i>Rex BRINGULA, Roman Paulo BAET, Ralph Lawrence GARCIA, Franchesca Mari MORALES, Jan Carlo RAMOS, Hanna Sophia SARMIENTO & Edmon TORRES</i> 7S: Teachers' Perspectives on Integrating AI Tools in Classrooms: Insights from the Philippines <i>Vanessa B. SIBUG, Vicky P. VITAL, John Paul P. MIRANDA, Emerson Q. FERNANDO, Almer B. GAMBOA, Hilene E. HERNANDEZ, Joseph Alexander BANSIL, Elmer M. PENECELLA & Dina D. GONZALES</i> 10S: Research on the Dual-Pathway Impact of Artificial Intelligence Technology on Teachers' Human-Machine Collaboration <i>Yujie XU & Yiling HU</i> 30S: Does Learning Interest Predict Academic Performance in an Interest-Driven HyFlex Course? <i>Liang Jing TEH, Su Luan WONG, Mohd Zariat Abdul Rani, Mas Nida MD KHAMBARI & Sai Hong TANG</i>	JJ Atencio Lighthouse
	SIG 2 Community Building (CB) Session Computer-Supported Collaborative Learning and Learning Sciences (CSCL) Chair: <i>Lenka SCHNAUBERT</i> , University of Nottingham, United Kingdom	Campos Interactive Teaching Lab
16:50 to 17:50	Poster Session 1 Posters Work-in-Progress Posters (WIPP) SATELUC	Innovation Lobby (2nd Floor)
18:00 to 22:00	APSCE Executive Committee (EC) Meeting (closed meeting)	

**ICCE 2024**32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Conference Program

Thursday, 28 November 2024

C1: AIED/ITS

C2: CSCL

C3: ALT

C4: TEMPL

C5: EGG

C6: TELL

C7: PTP

BOPN Best Overall Paper Award Nominee

BSPN Best Student Paper Award Nominee

BTDPN Best Technical Design Paper Award Nominee

F Full Paper (20 minutes presentation + 5 minutes Q&A)

S Short Paper (10 minutes presentation + 5 minutes Q&A)

ES Extended Summary (9 minutes presentation + 5 minutes Q&A)

Thursday, 28 November 2024

09:00 to 10:00	Keynote Speech: Mirjam HAUCK Critical Virtual Exchange for Critical Global Citizenship Education Session Chair: Yanjie SONG	Hyundai Hall
10:00 to 10:20	Coffee / Tea Break Food Service Station & Dining Area: Ubuntu Space Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft & Ubuntu Space
10:20 to 11:00	Theme-Based Invited Speech: Ching Sing CHAI In Search of Intelligent Pedagogical Content Knowledge (IPACK) Session Chair: Rwitajit MAJUMDAR	Hyundai Hall
	Theme-Based Invited Speech: Wenli CHEN Multi-Modal Learning Analytics for Learning Design Session Chair: Ivica BOTICKI	Doreen Black Box
11:00 to 12:00	Panel-1 Digital Technology for Inclusive and Equitable Quality Education <i>Wei qin CHEN, Jon MASON, Faisal BADAR, Shitanshu MISHRA & Maria Mercedes T. RODRIGO</i>	Hyundai Hall
	ALT-4 Session Chair: Yilling DAI 4S: Exploring the Relationship of Personality Domains and Visual Attention Patterns in Novice Programmers <i>Caren PACOL, Maria Mercedes RODRIGO & Christine Lourrine TABLATIN</i> 35S: Construction of a Japanese Language Learning Support System That Enables Word Accent Learning <i>Satoru KOGURE, Kazuki TOMITA, Yasuhiro NOGUCHI, Koichi YAMASHITA, Tatsuhiro KONISHI & Makoto KONDO</i> 41S: Developing a Feedback Analytic Tool to Support Instructor Reflection <i>Feng LIN, Chenchen LI, Rebekah Wei Ying LIM & Yew Haur LEE</i> 139S: Effect of Re-Composition Concept Mapping for Sharing Reference Maps on Serial Concept Mapping: A Preliminary Study <i>Rian FITRIANSYAH, Harry Budi SANTOSO, Lia SADITA, Baginda Anggun Nan CENKA, Syifa NURHAYATI, Yusuke HAYASHI & Tsukasa HIRASHIMA</i>	Doreen Black Box

**ICCE 2024**32nd International Conference
on Computers in Education
MANILA, PHILIPPINES**Thursday, 28 November 2024**

11:00 to 12:00	AIED/ITS-4 Session Chair: Michelle BANAWAN 94F BOPN: Predicting and Analyzing Students' Higher-Order Questions in Collaborative Problem-Solving <i>Shan ZHANG, Toni V. EARLE-RANDELL, Qian SHEN, Anthony F. BOTELHO, Maya ISRAEL, Kristy Elizabeth BOYER, Collin F. LYNCH & Eric WIEBE</i> 120F BTDPN: Reflection Support System with Audience Robots for Presentation Practice <i>Yuya KISHIMOTO & Tomoko KOJIRI</i>	The Loft
	TEML-2 Session Chair: Changhao LIANG 132F: Classifying Self-Reflection Notes: Automation Approaches for GOAL System <i>Zixu WANG, Chia-Yu HSU, Izumi HORIKOSHI, Huiyong LI, Rwitajit MAJUMDAR & Hiroaki OGATA</i> 50S: Using Educational VR Systems to Promote Inquiry-Based Learning in Natural Science <i>Shu-Ying TSAI, Zhi-Hong CHEN & Min-Hsuan WENG</i> 135S: Generative Artificial Intelligence in Education: Evaluating Students' Self-Efficacy and Utilization in Their Homework <i>Elanie VIZCONDE, Ma. Rowena CAGUIAT & Ethel ONG</i>	The Hive
	PTP-3 Session Chair: Mas Nida MD KHAMBARI 19S: Using a Teaching Framework to Identify Resilient and Persistent Teaching Practices During the Pandemic <i>Ma. Monica L. MORENO, Johanna Marion R. TORRES, Timothy Jireh GASPAS, Jenilyn A. CASANO & Maria Mercedes T. RODRIGO</i> 92S: Evaluating the Effectiveness of a Professional Development Course on Artificial Intelligence Literacy for Administrative Staff in Higher Education <i>Siu Cheung KONG, Zoe Wai Sum MAK, Yue WU & Yin YANG</i> 140S: From Textbooks to Classroom Implementation: Experience Report of Middle School Science Teachers' Pedagogy for Activity-Based Learning <i>Zun Phoo MO, Sunny Prakash PRAJAPATI, Sheeja VASUDEVAN & Sahana MURTHY</i> 155S: Appropriating AI-Powered Pedagogical Affordances for Vocabulary Learning <i>Xinyu GUO & Yun WEN</i>	JJ Atencio Lighthouse
12:00 to 13:00	Lunch Food Service Station & Dining Area: Ubuntu Space Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft & Ubuntu Space
13:00 to 14:00	Keynote Speech: Michelle BANAWAN Learning from Generative AI for Cognitive and Pedagogical Advancement Session Chair: Maria Mercedes RODRIGO	Hyundai Hall



ICCE 2024

32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Thursday, 28 November 2024

14:00 to 15:30	<p>ALT-5 Session Chair: Banni Satria ANDOKO</p> <p>48F BTDPN: Designing Recommendations for Productive Learning Habit-Building from Learning Logs <i>Chia-Yu HSU, Izumi HORIKOSHI, Huiyong LI, Rwitajit MAJUMDAR & Hiroaki OGATA</i></p> <p>101F: Designing Interaction Scenario for Alleviating Persistence in Learning Strategies <i>So SASAKI & Akihiro KASHIHARA</i></p> <p>166F: Enhancing Vocational Training Through Immersive Technology: A Study on Digital Magic Mirrors <i>Jen-Hang WANG, Hung-Wei TSENG, Su-Hang YANG, Chih-Kai CHANG, Yung-Yu ZHUANG & Gwo-Dong CHEN</i></p> <p>145S: Facilitating Thinking like a Historian in Open-Ended Learning Space: A White Box Approach <i>Aoi MATSUURA, Yuki HAYASHI & Kazuhisa SETA</i></p>	Doreen Black Box
	<p>CSCL-2 Session Chair: Ben CHANG</p> <p>52S: Students' Verbal Interaction Patterns in Computer-Supported Collaborative Learning: The Role of Individual Preparation <i>Wenli CHEN, Lishan ZHENG, Mei-Yee Mavis HO, Qianru LYU, Hua HU & Zirou LIN</i></p> <p>88S: Enhancing Social Learning in Active Video Watching <i>Ehsan BOJNORDI, Antonija MITROVIC, Matthias GALSTER, Sanna MALINEN, Jay HOLLAND & Negar MOHAMMADHASSAN</i></p> <p>124S: Rethinking Trust in Human-AI Collaboration in the Generative AI Era <i>Yijie LU & Bo JIANG</i></p> <p>147S: Infrastructuring for Collective Cognitive Responsibility: A Case Study of Student Knowledge Building Design Studio <i>Chew Lee TEO, Aloysius ONG, Alwyn LEE, Guangji YUAN & Kennedy LOO</i></p> <p>148S: Review of Different Assessment Methods Used by Online Inquiry-Based Learning Systems That Support Argumentation <i>Nitesh Kumar JHA, Plaban Kumar BHOWMIK & Kaushal Kumar BHAGAT</i></p> <p>200S: Investigating Secondary School Students' Academic Emotions in Data Science Learning <i>Gaoxia ZHU, Chew Lee TEO, Guangji YUAN, Chin Lee KER, Aloysius ONG & Alwyn Vwen Yen LEE</i></p>	The Loft
	<p>EGG-2 Session Chair: Jie-Chi YANG</p> <p>65F BTDPN: A Robot-Assisted Scenario Training for Students with ASD <i>Ka Yan FUNG, Kwong Chiu FUNG, Tze-Leung Rick LUI, Feifan PANG, Huamin QU, Shenghui SONG & Kuen Fung SIN</i></p> <p>103F: Exploring the Impact of Incorporating Digital Escape Room on Learners' Performance and Motivation in Environmental Sustainability Education <i>Yu-Chao LAI & Jie-Chi YANG</i></p> <p>133S: Middle School Students' Ability to Detect Lies When Interacting with an Educational AI Robot <i>Ahmed SALEM & Kaoru SUMI</i></p>	The Hive

**ICCE 2024**32nd International Conference
on Computers in Education
MANILA, PHILIPPINES**Thursday, 28 November 2024**

14:00 to 15:30	PTP-4 Session Chair: Shitanshu MISHRA 114F BTDPN: Extraction of Important Characteristics for Data-Informed Guidance and Counseling from Daily Usage Log Data <i>Junya ATAKE, Chia-Yu HSU, Izumi HORIKOSHI & Hiroaki OGATA</i> 146F: Driving Informed EdTech Quality Decisionmaking: A Research-Practice Partnership-Based Solution for Diverse Stakeholders' Needs <i>Ishika ISHIKA, Angelina Susan PHILIP, Sheeja VASUDEVAN & Sahana MURTHY</i> 20S: Determinants of ChatGPT Adoption in Academe & Other Fields – A Review on Theoretical Perspective <i>Gerand Boy O. ELINZANO & Michelle Renee CHING</i> 171S: Exploring the Entanglement Between Technology and Pedagogy: A Case Study of Knowledge Building <i>Yee Yin TAN, Seng Chee TAN & Chew Lee TEO</i>	JJ Atencio Lighthouse
	SIG 9 Community Building (CB) Session Educational Use of Problems/Questions in Technology-Enhanced Learning (EUPQ) Chair: <i>Shitanshu MISHRA</i> , Indian Institute of Technology Bombay, India	Campos Interactive Teaching Lab
15:30 to 15:50	Coffee / Tea Break Food Service Station & Dining Area: Ubuntu Space Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft & Ubuntu Space
15:50 to 16:50	ALT-6 Session Chair: Shinobu HASEGAWA 91S: Boosting Course Recommendation Explainability: A Knowledge Entity Aware Model Using Deep Learning <i>Tianyuan YANG, Baofeng REN, Boxuan MA, Tianjia HE, Chenghao GU & Shin'ichi KONOMI</i> 191S: Error Tolerance in Automatic Short Answer Grading with Large Language Models: The Case of Handwriting Recognition Errors <i>Ziqi TAN, Yingbin ZHANG & Su MU</i> 209ES: Identifying Key Indicators of Proficiency in Junior High Math: Roles of Daily Handwriting Learning Logs <i>Yudai OKAYAMA, Changhao LIANG, Kensuke TAKII & Hiroaki OGATA</i> 267ES: Relationship Analysis Between Procrastination Behavior and Non-Cognitive Abilities <i>Yasuhisa TAMURA & Keito MORINO</i>	Doreen Black Box



ICCE 2024

32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Thursday, 28 November 2024

15:50 to 16:50	<p>AIED/ITS-5 <i>Session Chair: Rwitajit MAJUMDAR</i></p> <p>151F: Facilitating Holistic Evaluations with LLMs: Insights from Scenario-Based Experiments <i>Toru ISHIDA, Tongxi LIU, Hailong WANG & William K. CHEUNG</i></p> <p>126S: Is Internal State Feedback in an E-Learning Environment Acceptable to People? <i>Atsushi ASHIDA, Ryosuke KAWAMURA, Shizuka SHIRAI, Noriko TAKEMURA, Mehrasa ALIZADEH, Hideaki HAYASHI & Hajime NAGAHARA</i></p> <p>211ES: Integrating Explanations in Active Video Watching <i>Raul Vincent LUMAPAS, Antonija MITROVIC, Matthias GALSTER, Sanna MALINEN, Pasan PEIRIS & Jay HOLLAND</i></p>	The Loft
	<p>TELL-2 <i>Session Chair: Yanjie SONG</i></p> <p>158F BOPN: Open Knowledge and Learner Model: Mathematical Representation and Applications as Learning Support Foundation in EFL <i>Kensuke TAKII, Changhao LIANG & Hiroaki OGATA</i></p> <p>157S: The Effect of LINE Chatbot with Escape Game Design on English Learning Achievement, Situational Interest, and Student Engagement <i>Elva Yi-Fang LO & Jerry Chih-Yuan SUN</i></p> <p>112S: Examining Augmented Reality's Influence on Pronunciation Training: Insights from PinyinGuo's Application and Comparative Avatar Testing <i>Daria SINYAGOVSKAYA</i></p>	The Hive
	<p>PTP-5 <i>Session Chair: Aditi KOTHIYAL</i></p> <p>95S: Determinants of ICT Competency Among Public School Teachers in Bukidnon <i>Gladys S. AYUNAR, Nathalie Joy G. CASILDO, May Marie P. TALANDRON-FELIPE, Kent Levi A. BONIFACIO, Jinky G. MARCELO & Fe S. SEBUGUERO</i></p> <p>226ES: Preliminary Exploration on the Dimensions of Digital Learning Agility Among Teachers in Malaysia <i>Nur Dania MOHD ROSLI, Kamilah ABDULLAH, Mas Nida MD. KHAMBARI, Su Luan WONG, Noor Syamilah ZAKARIA, Priscilla MOSES & Nur Aira ABDRAHIM</i></p> <p>228ES: Analysis of Factors Influencing Teacher Behavioural Engagement in Distance Training Based on MOA and SDT <i>Zhou JIN</i></p> <p>257ES: The Impact of AI Literacy on Teacher Efficacy and Identity: A Study of Korean English Teachers <i>Seunmin EUN & Anna KIM</i></p>	JJ Atencio Lighthouse



ICCE 2024
32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Thursday, 28 November 2024

16:50 to 17:50	SIG 6 Community Building (CB) Session Technology Enhanced Language Learning (TELL) Chair: <i>Yanjie SONG</i> , The Education University of Hong Kong, Hong Kong	JJ Atencio Lighthouse
	Poster Session 2 Posters Work-in-Progress Posters (WIPP) SATELUC	Innovation Lobby (2nd Floor)
18:30 to 21:30	Conference Banquet	Leong Hall Roof Deck

**ICCE 2024**32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Conference Program

Friday, 29 November 2024

C1: AIED/ITS

C2: CSCL

C3: ALT

C4: TEMPL

C5: EGG

C6: TELL

C7: PTP

BOPN Best Overall Paper Award Nominee

BSPN Best Student Paper Award Nominee

BTDPN Best Technical Design Paper Award Nominee

F Full Paper (20 minutes presentation + 5 minutes Q&A)

S Short Paper (10 minutes presentation + 5 minutes Q&A)

ES Extended Summary (9 minutes presentation + 5 minutes Q&A)

Friday, 29 November 2024

09:00 to 10:00	Keynote Speech: Seiji ISOTANI Personalized Gamification Experiences: From Design to Impact Session Chair: Bo JIANG	Hyundai Hall
10:00 to 10:20	Coffee / Tea Break Food Service Station & Dining Area: Ubuntu Space Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft & Ubuntu Space
10:20 to 12:00	ALT-7/8 Session Chair: Huiyong LI 70F: Effectiveness of Information Organizing Activities After Lecture in Mathematics: A Comparison Between Kit-Build Concept Mapping and Structured Summary Writing <i>Lintang Matahari HASANI, Kasiyah JUNUS, Lia SADITA, Tsukasa HIRASHIMA & Yusuke HAYASHI</i> 77F BSPN: Automated Recommendations for Revising Lecture Slides Using Reading Activity Data <i>Erwin D. LOPEZ Z, Cheng TANG, Yuta TANIGUCHI, Fumiya OKUBO & Atsushi SHIMADA</i> 40S: Optimizing Causal Inference Approach for Exploring Shallow Reading Behavior with Generative Adversarial Networks <i>Yu BAI, Fuzheng ZHAO, Wenhao WANG & Chengjiu YIN</i> 60S: Exploring Linguistic Sophistication of Discussion Board Posts in University Learning Management Systems <i>Michelle P. BANAWAN, Clarence James MONTEROZO & Maria Mercedes T. RODRIGO</i> 227ES: Toward Contextualized Handwriting Process Analysis: Comparison Between Problem Types in Math <i>Shunsuke TONOSAKI, Taito KANO, Satomi HAMADA, Izumi HORIKOSHI & Hiroaki OGATA</i>	Doreen Black Box



ICCE 2024

32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Friday, 29 November 2024

10:20 to 12:00	<p>TEML-3/4 Session Chair: Sasipim POOMPIMOL</p> <p>51F BOPN: Low vs. High Immersion in Metaverse-Based Learning: How Pre-Service Teachers Balanced Between Instruction and Assessment in Learning Design <i>Darmawansah DARMAWANSAH, Dani PUSPITASARI & Gwo-Jen HWANG</i></p> <p>160S: Participatory Design of an AI Digital Textbook with Deaf and Hard-of-Hearing Students <i>Ga Young LEE, Jieun CHOI, Seonhee NA & Hyo-Jeong SO</i></p> <p>161S: Technology Considerations in Building Virtual Educational Avatars <i>Antun DROBNJAK & Ivica BOTICKI</i></p> <p>194S: Data-Driven Peer Recommendation and Its Applications in Extracurricular Learning <i>Peixuan JIANG, Changhao LIANG & Hiroaki OGATA</i></p>	The Loft
10:20 to 11:10	<p>AIED/ITS-6 Session Chair: Riichiro MIZOGUCHI</p> <p>238ES: Personalized Comment Reviewing in Active Video Watching: Investigation of Learners' Cognitive Load <i>Ehsan BOJNORDI, Antonija MITROVIC, Matthias GALSTER, Sanna MALINEN & Jay HOLLAND</i></p> <p>251ES: AI-Driven Feedback for Enhancing Students' Mathematical Problem-Solving: The ScaffoldiaMyMaths System <i>Daner SUN, Jingyun WANG, Lan YANG, Kee-lee CHOU, Zhixuan SONG & Zhizi ZHENG</i></p> <p>259ES: A Study on High School Students' Continuance Intention to Use ChatGPT for Learning Assistance: An Exploration Based on Self-Determination Theory <i>Chien-Liang LIN, Tian-Yun LIN, Shi-En LIN & Yu-Chen LIN</i></p>	The Hive
	<p>CSCL-3 Session Chair: Gaoxia ZHU</p> <p>185F: Online Making-Based Learning at Scale: Towards Equity in STEM Learning <i>Deeksha GAUTAM, Aditi KOTHIYAL, Rashmi SHEORAN, Neha GARG, Adithi IYER, Ashutosh BHAKUNI, Jay THAKKAR, Jyothi KRISHNAN & Manish JAIN</i></p> <p>99S: Verbal Interaction Patterns in Online Collaborative Learning Design: Comparison of High Performing and Low Performing Groups <i>Wenli CHEN, Lishan ZHENG, Mei-Yee Mavis HO, Hua HU & Qianru LYU</i></p>	JJ Atencio Lighthouse



ICCE 2024

32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Friday, 29 November 2024

11:10 to 12:00	<p>TELL-3 Session Chair: Daria SINYAGOVSKAYA</p> <p>115S: Improve English Pronunciation at Word Level for Thai EFL Learners in Southern Region Using End-to-End Automatic Speech Recognition <i>Nattapol KRITSUTHIKUL, Kongpop BOONMA, Jirapond MUANGPRATHUB, Wasan NA CHAI & Thepchai SUPNITHI</i></p> <p>128S: Investigation on the Usage Status of a Support System for Writing English Paragraph Outlines in English Classes <i>Afifah ILHAM, Tomohiro KUROKI, Akira NAKANO & Hidenobu KUNICHIKA</i></p> <p>152S: Mapping Morphological Patterns: A Framework for Rinconada Bikol Language Morphological Analysis and Stemming <i>Tiffany Lyn PANDES & Joshua MARTINEZ</i></p>	The Hive
	<p>PTP-6 Session Chair: Arlene VALDERAMA</p> <p>183F: Constructing Desirable Learning Habits: Evidence from an Instructional System Design Course Based on the IDC Theory <i>Anveshna SRIVASTAVA, Sandeep YADAV, Sahana MURTHY & Sridhar IYER</i></p> <p>188F BSPN: The Impact of Using an Online Collaborative Platform in Blended Learning on Postsecondary Vocational School Year One Students' Self-Regulated Learning Abilities: A Quasi-Experimental Research <i>Siyoun WU & Alex Wing Cheung TSE</i></p>	JJ Atencio Lighthouse
12:00 to 13:00	<p>Lunch Food Service Station & Dining Area: Ubuntu Space</p> <p>Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse</p>	The Loft & Ubuntu Space
13:00 to 14:00	<p>ALT-9 Session Chair: Anveshna SRIVASTAVA</p> <p>9S: Code Tracing Support Environment Based on Visualization of Cooperative Behavior of Multiple-Flows <i>Yasuhiro NOGUCHI, Kotaro SUNAMA, Satoru KOGURE, Raiya YAMAMOTO, Koichi YAMASHITA & Tatsuhiko KONISHI</i></p> <p>90S: Peer Feedback Feature Analysis with Large Language Models: An Exploratory Study <i>Qianru LYU, Zirou LIN & Wenli CHEN</i></p> <p>214ES: Relationship Between Students' Scores in Weekly Tests and Final Exam <i>Satomi HAMADA, Izumi HORIKOSHI & Hiroaki OGATA</i></p> <p>218ES: Exploring Reading Speed Profiles in EFL Extensive Reading <i>Hatsune ICHIDATE, Yiling DAI, Brendan FLANAGAN & Hiroaki OGATA</i></p>	Doreen Black Box



ICCE 2024

32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Friday, 29 November 2024

13:00 to 14:00	<p>TELL-4 Session Chair: Leung Ho Philip YU</p> <p>14S: Enhancing Chinese Language Education Through AI-Assisted Project-Based Learning: A Qualitative Study on Learning Values and Multimedia Skills Development <i>Satoko SUGIE</i></p> <p>184S: Development of a Chatbot and Evaluation of Its Effects on Learning and Intrinsic Motivation of a Public Secondary School's Spanish Language Learners <i>Julian Eymard JANUBAS, Josiah Jose DEYSOLONG, Hanz Lucas ESTOPIA, Karl Mykell TABBAY & Jun Rangie OBISPO</i></p> <p>186S: Enhancing Language Learning Through Multimodal AI-Driven Feedback on Picture Descriptions: An Eye-Tracking Study <i>Ruibin ZHAO, Zhiwei XIE, Yipeng ZHUANG, Huixian LI, Philip L. H. YU</i></p>	The Loft
	<p>EGG-3 Session Chair: Ming-Chi LIU</p> <p>73S: FLOU: Evaluating the Intrinsic Motivation of Learners in Gamifying Academic Programs Through a Gamified Mobile Application <i>Marl Vincent AGRAVANTE, Jeru Kian FERNANDEZ, Ma. Louisa PEREZ & Joshua MARTINEZ</i></p> <p>164S: Designing an Educational Game for Facilitating Development of Media and Information Literacy <i>Jun XIE, Xiang LI, Kotomi HASEGAWA, Zhichun LIU & Frank REICHERT</i></p> <p>262ES: Developing a Visualized Data Guessing Game to Assess Data Literacy <i>Ruei-Yi XIE & Ming-Chi LIU</i></p>	The Hive
14:15 to 15:15	<p>Closing Ceremony</p>	Hyundai Hall



ICCE 2024

32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Poster Session 1

Wednesday, 27 November 2024, 16:50–17:50

C1: AIED/ITS

47P: Image-Based Pili (*Canarium ovatum*, Engl.) Fruit Variety Classifier App: An Approach to Enhancing Teaching Biodiversity and Crop Science

Leo Constantine BELLO & Joshua MARTINEZ

54P: Authorship Forensics Portal

Robert SCHMIDT, Maiga CHANG, Hsiang-Han CHENG, Greg FREDIN, Kevin HAGHIGHAT & Rita KUO

55P: Designing Learner-Centered Collaborative Learning by Incorporating AI-Based Teacher/Learner Agents with a Cognitive Model

Yugo HAYASHI, Shigen SHIMOJO & Tatsuyuki KAWAMURA

59P: Student Perceptions of Using Generative AI Chatbot in Learning Programming

Ean Teng KHOR, Leta CHAN, Elizabeth KOH & Peter SEOW

C3: ALT

12P: Towards the Development of PIA 2.0: A Pedagogical Agent That Exhibits Synthetic Facial Expressions

John Lorenz DELA CRUZ, Paulyn Joy DELA CRUZ, Joyce Antonette GUADALUPE, Jiabianca MACARAEG, Piolo Jose MONTESA, Mark Paul RAMOS & Rex BRINGULA

32P: Early Detection of At-Risk Students Through Learning-Activity Forecasting

Yuya OZAKI, Daisuke DEGUCHI, Haruya KYUTOKU & Hiroshi MURASE

165P: What Insights Are Gained from Students' Trace Data in Homework?

Satomi HAMADA, Yuko TOYOKAWA, Taito KANO, Izumi HORIKOSHI & Hiroaki OGATA

C4: TEML

36P: A TPB-TAM Approach to Identifying Adoption Factors of Hyflex Among Educators

Elanie VIZCONDE, Joshua ISAGUIRRE, Gabriel Luis LIWANAG & Ryan EBARDO

111P: Designing Interactive Mathematical Teaching Tools for Tablet-Based Learning: Enhancing Student Engagement and Tactile Exploration

Loong-Chuan LEE, Chia-Ying LIN, Yu-Han TAN & Kuo-Yu LIU

C6: TELL

127P: Implementation and an Evaluation of a Search Function Allowing Misspelling for a Japanese Learning System

Hideobu KUNICHIKA & Miguel Antonio VILLALOBOS ZUNIGA

C7: PTP

2P: An Experience Sampling Study of Student Emotional Life: Preliminary Results

Maria Mercedes T. RODRIGO, Liane Peña ALAMPAY, Queena N. LEE-CHUA & Irish Danielle MORALES

3P: Theory-Driven Design for the Development of a Student-Centered Error-Correction Online Learning System

Fu-Yun YU

62P: Contextual Factors Affecting Large-Scale Educational Technology Implementation: Policy Intention Versus Practice

Arjun PRASAD, Jayakrishnan WARRIEM & Sridhar IYER



ICCE 2024
32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Poster Session 1

Wednesday, 27 November 2024, 16:50–17:50

WIPP

- 216WIPP:** Support System for Focused Discussion in Consensus Building for Team Sports
Kazuma KUWADA & Tomoko KOJIRI
- 222WIPP:** Understanding Collaborative Teacher Growth from the Lens of Digital Learning Agility: A Pathway to Educational Excellence
Kamilah ABDULLAH, Mas Nida MD KHAMBARI, Su Luan WONG, Noor Syamilah ZAKARIA, Nur Dania MOHD ROSLI, Nur Aira ABD RAHIM & Priscilla MOSES
- 239WIPP:** Online Educational Game for Interior Design with Design Thinking Process and Multidimensional Scaffolding
Chou-Pai YEOH & Huei-Tse HOU
- 247WIPP:** Microlearning Strategy in ICT Education
Kotaro TORII
- 250WIPP:** What Do University Students Say About ChatGPT? A Topic Modeling of Perception on GenAI in Academic Writing
Lingxi JIN, Kyuwon KIM, Hyo-Jeong SO & Ga Young LEE
- 265WIPP:** Generative AI and XR in Education: Student Co-Created Metaverse Worlds in an International Virtual Exchange
Masako HAYASHI

SATELUC

- 207SAT:** Transforming Education in Timor-Leste: The Role of E-Learning and Artificial Intelligence in Boosting Student Achievements
Estanislau SOUSA SALDANHA, Edio DA COSTA, Aderita MARIANA TAKELEB, Salustiano DOS REIS PIEDADE & Carla ALEXANDRA DA COSTA (Timor-Leste)
- 208SAT:** Learning with Virtual Avatars: Insights into Performance and Resource Needs
Antun DROBNJAK & Ivica BOTICKI (Croatia)
- 219SAT:** MS Teams Acceptance Factors Among Polish and Ukrainian Students
Nataliia DEMESHKANT, Sławomir TRUSZ, Tetiana MATUSEVYCH & Amy SEPIOŁ (Poland / Ukraine)
- 225SAT:** Boosting Literacy with an Educational RPG for Polytechnic Students
Agung Nugroho PRAMUDHITA, Puteri Ardista Nursisda MAWANGI & Banni Satria ANDOKO (Indonesia)
- 230SAT:** Development of the Board Game 'Career Champion': Gamification for Understanding Job Interview Preparation
Farid Angga PRIBADI, Banni Satria ANDOKO & Erina SEVIYANTI (Indonesia)
- 232SAT:** AI Tools Experience in Civitas Academic Portal in Timor Leste
Agostinho Dos Santos GONÇALVES, Sebastião PEREIRA & Saida ULFA (Timor-Leste)
- 233SAT:** AI Literacy Among Lecturers in University: A Case Study in a Private University in Timor Leste
Agustinho Dos Santos GONCALVES, Jacinto de OLIVEIRA JUNIOR, Natalino Pereira PARADA & Saida ULFA (Timor-Leste)
- 235SAT:** Lecturer Performance Assessment System Based on Tridharma Using Saw Method
Anita GUTERRES, Delfim da SILVA & Antonio GUTERRES (Timor-Leste)
- 252SAT:** AI as a Co-Teacher: Enhancing Creative Thinking in Underserved Areas
Roberto ARAYA (Chile)
- 268SAT:** Global Trends in Computational Thinking in Curricula: A Comparative Review
Martha Nury BONILLA-CASTAÑEDA, Klinge Orlando VILLALBA-CONDORI, Hector CARDONA-REYES, Claudia ACRA-DESPRADEL & Kee-Fui TURNER-LAM (Colombia / Peru / Mexico / Dominican Republic)



ICCE 2024
32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Poster Session 2

Thursday, 28 November 2024, 16:50–17:50

C1: AIED/ITS

- 66P:** Quality Criteria Acquisition Support System of Product by Explaining It with Components
Kota KUNORI & Tomoko KOJIRI
- 74P:** Exploring Explainable Artificial Intelligence in Active Video Watching
Raul Vincent LUMAPAS, Antonija MITROVIC, Matthias GALSTER & Sanna MALINEN
- 87P:** A Proposal of Quality Assurance Programming Exercise
Nobuya ISHIHARA, Samsul HUDA & Yasuyuki NOGAMI
- 89P:** Enhancing Engagement in Distance Learning: Overcoming Learner Isolation Through ICT Tools
Kumiko AOKI, Itaru KANEKO, Ken KURIYAMA, Takeo TATSUMI & Takahiro MIYAJIMA
- 96P:** Scaffolding Students' Ill-Structured Problem Solving via LLM — Multi-Armed Bandit Problem as a Case
Jiayi LIU & Bo JIANG
- 102P:** Navigating Europe's Artificial Intelligence Act: Application of LLMs in Classrooms
Upasana DASGUPTA & Rwitajit MAJUMDAR
- 142P:** Learning Support Environment with Fill-in-Blank Exercise Based on Program Visualization System
Koichi YAMASHITA, Shuya SUZUKI, Satoru KOGURE, Yasuhiro NOGUCHI, Raiya YAMAMOTO, Tatsuhiko KONISHI & Yukihiro ITOH

C2: CSCL

- 38P:** Pyzzles: Towards the Design of a Zugzwang-Inspired Learning Tool for Novice Programmers and Its Effect on Debugging Skills and Self-Perceived Debugging Confidence
Elijah Justin CALLANTA
- 195P:** BioAnalogica: SBF-Based Analogical Stories to Enhance Understanding of Complex Biological Processes
Meera PAWAR, Sheeja VASUDEVAN & Sahana MURTHY
- 198P:** Challenging the Eye-Mind Link Hypothesis: Visualizing Gazes for Each Programming Problem
Michael T. LOPEZ II

C3: ALT

- 49P:** Program Learning Support System with Visualization Reflecting Teacher's Intent for Learner's Code
Kenzo KOBAYASHI, Satoru KOGURE, Yasuhiro NOGUCHI, Raiya YAMAMOTO, Koichi YAMASHITA, Tatsuhiko KONISHI & Yukihiro ITOH
- 154P:** Development of Annotation System for Learning from Others in Public Space Design Using Extended Reality
Toshiki MUGURUMA, Yusuke YAGI, Yusuke KOMETANI, Saerom LEE, Naka GOTODA & Rihito YAEHASHI
- 156P:** Development of Laborer Digital Twin Generation and Visualization Function for Hazard Prediction in Off-Site Training
Kaito MINOHARA, Toshiki MUGURUMA, Yusuke KOMETANI, Naka GOTODA, Saerom LEE, Ryo KANDA, Shotaro IRIE & Toru HARAI
- 176P:** HyCode: A Code Similarity Assessment Tool Utilizing Recurrent Neural Networks
James Marcel A. ABAWAG, Aleczia S. TORDILLA & Joshua C. MARTINEZ
- 178P:** Empowering Educational Researchers with a Privacy-Centric Data Platform: Design, Implementation, and Implications
Isanka WIJERATHNE, Brendan FLANAGAN & Hiroaki OGATA
- 199P:** Exploring the Relationship Between Assignment Submission Behavior and Final Grade of Information Literacy Education Using Big Data
Yuki OE, Etsuko KUMAMOTO, Huiyong LI & Chengjiu YIN



ICCE 2024

32nd International Conference
on Computers in Education
MANILA, PHILIPPINES

Poster Session 2

Thursday, 28 November 2024, 16:50–17:50

C5: EGG

5P: Exploring the Effects of Leaderboards on an Online Professional Development Course for Teachers

Aime Michelle LAZARO & Marlene DE LEON

170P: Game-Based College English Translation Instructional Design Based on Representational Redescription Model: Implicit Knowledge Transformed into Explicit Knowledge

Xinyu JIANG, Mengya CHEN & Lu HUANG

C7: PTP

11P: Online Student Testlet-Generation as an Innovation Approach to Student-Created Assessment Its Learning Effects

Fu-Yun YU & Ya-Shin CHANG

110P: AI and Data Science Literacy Framework for Educators

Nurul Amelina NASHARUDDIN, Nurfadhlin MOHD SHAREF & Mohd Khaizer OMAR

138P: Challenges to Augmenting Literacy in the Digital Environment

Khalid KHAN & Jon MASON

169P: Unboxing Learner Engagement in an Online SEL for Teachers Course on FramerSpace

Hritik GUPTA, Nandini Chatterjee SINGH & Shitanshu MISHRA

WIPP

221WIPP: Influence of Telepresence Robot on Discussion in Hybrid Classes

Hiroaki ARUGA & Akihiro KASHIHARA

234WIPP: Proposal for Simulation Environment to Support Understanding of Tactical Positioning

Yuki OHTSUKA & Tomko KOJIRI

240WIPP: An Online MMORPG Card Game Based on Multi-Dimensional Scaffolding to Develop Reading Comprehension and Contextual Problem-Solving Skills

Cheng-Tai LI, Chou-Pai YEOH, Yu-Chi CHEN, Hung-Yu CHAN, Yun-Chien CHUNG, Yu-Jen LIN, Min-Hsiong HONG, Cheng-Yuan WEI & Huei-Tse HOU

249WIPP: Instructors' Perceptions and Use of Feedback Dashboard

Feng LIN & Rebekah Wei Ying LIM

255WIPP: Exploring Student Emotion via Facial Expressions Using Transfer Learning

Tita HERRADURA, Macario CORDEL II & Merlin Teodosia SUAREZ

263WIPP: The Effect of Stimulus Concurrence on Memorizing Constellations in VR

Nicko CALUYA, Eiji YAHARA & Damon CHANDLER