

# **Conference Program** Monday, 25 November 2024

Monday	y, 25 November 2024	
09:00 to 10:30	Session Chair: Chiu-Lin LAI  ECW01: Can Use of Technologies help Reduce Biases in Academic Recruitment  Kashmira DAVE  ECW02: Leveraging AI-Powered Virtual Meeting Summaries: Towards an Evidence-Based Classroom Observation Assessment  Arlene Mae CELESTIAL VALDERAMA  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	Doreen Black Box
	W01-1: 4th International Workshop on Embodied Learning: Technology Design, Analytics & Practices Session Chair: Rwitajit MAJUMDAR W01-004F: Exploring Cognitive Engagement in AI-Driven Adaptive Psychomotor Sport Training Miguel PORTAZ, Rwitajit MAJUMDAR & Olga C. SANTOS W01-005F: Exploring Graph Slopes Through a Series of Embodied Learning Experiences Priyadharshni ELANGAIVENDAN, Melwina ALBUQUERQUE, Shizuka DARA & Sanjay CHANDRASEKHARAN	The Loft
	<ul> <li>W03-1: Analysis and Design of Problems/Questions in the Digital Environment: The 17th Workshop on Technology Enhanced Learning by Posing/Solving Problems/Questions</li> <li>Session Chair: Yusuke HAYASHI</li> <li>W03-002: Difficulty-Controllable Reading Comprehension Question Generation Considering the Difficulty of Reading Passages Yuto TOMIKAWA &amp; Masaki UTO</li> <li>W03-005: Learning Effectiveness and Reflections on Al Literacy in Junior High School Students with Game-Based Learning and Problem-Based Learning Shih-Hua HUANG &amp; Ting-Chia HSU</li> <li>W03-009: Does Experience of Feedback Generation Promote Student Novel Problem Posing? An Empirical Study in a Database Course Kazuaki KOJIMA</li> </ul>	The Hive



/londay	/, 25 November 2024	
09:00 to 10:30	<ul> <li>W08-1: The 12th Workshop on Technology-Enhanced STEM Education (TeSTEM Workshop)</li> <li>Session Chair: Pawat CHAIPIDECH</li> <li>W08-001F: Novice Programmers' Saccadic Patterns in Error Message Comprehension and Syntax Error Identification Caren PACOL, Maria Mercedes RODRIGO &amp; Christine Lourrine TABLATIN</li> <li>W08-004F: Challenges and Opportunities for Designing and Implementing Ubiquitous Game-Based Learning to Cultivate Digital Citizenship in Thailand Patcharin PANJABUREE, Gwo-Jen HWANG, Niwat SRISAWASDI, Ungsinun INTARAKAMHANG &amp; Sasipim POOMPIMOL</li> <li>W08-005S: Reducing Undergraduate Students' Information Technologies (ITs) Anxiety Through Implementation of Blended Learning: A Case Study in the Basic Natural Science Course Anggiyani Ratnaningtyas Eka NUGRAHENI, Anggraeni Dian PERMATASARI &amp; Antuni WIYARSI</li> </ul>	JJ Atencio Lighthouse
	<ul> <li>W09-1: The 4th Workshop on Innovative Technologies for Enhancing Interactions and Learning Motivation</li> <li>Session Chair: Jerry Chih-Yuan SUN</li> <li>W09-001s: AR<sup>2</sup>: Augmented Reality for Enhanced Reading Comprehension Allan Jay ESTEBAN</li> <li>W09-002s: Developing the Interactive Game-Based Picture Book "Food Ninja" to Enhance Creativity in Elementary School Students Wen Chun LAN, De Jun MO &amp; Joni Tzuchen TANG</li> <li>W09-003F: An Estimation of Student Well-Being Using Experience Sampling Arthur W. NEBRAO, Jr. &amp; Maria Mercedes T. RODRIGO</li> <li>W09-004s: Exploring the Use of Short Video Social Media for Learning ESL in Indonesia Riska SAPUTRA, Tsaqufal JALILIY &amp; Intan SETIANI</li> <li>W09-005s: Narrative Introduction Text Generation Support System According to Reader Preferences Ryusei SHIMONAKA, Kota KUNORI &amp; Tomoko KOJIRI</li> <li>W09-007s: Galvanic Skin Responses and Flow: Insights from Multimodal Learning Analytics in Personal Learning Environment Yu-Lin HO, Yuan-Hsuan LEE &amp; Jiun-Yu WU</li> </ul>	Campos Interactive Teaching Lab
10:30 to 10:50	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



MANILA, PHILIPPINES		
Monda	y, 25 November 2024	
10:50 to 12:20	W01-2: 4th International Workshop on Embodied Learning: Technology Design, Analytics & Practices Session Chair: Jayakrishnan M. WARRIEM W01-006F: Unpacking Interaction Markers of Critical Thinking Aditi KOTHIYAL, Rwitajit MAJUMDAR, Shitanshu MISHRA, Jayakrishnan Madathil WARRIEM & Prajakt PANDE W01-007F: Actions and Interactions at Collaborative Engineering Design Hackathon: Looking Through the Lens of Embodied Cognition Soumya NARAYANAN, Navneet KAUR & Rwitajit MAJUMDAR W01-008F: Designing an AI-Enhanced Timeline for Monitoring Multimodal Interactions in Embodied Learning Environments Joyce FONTELES, Namrata SRIVASTAVA, Eduardo DAVALOS, Ashwin T S & Gautam BISWAS	The Loft
	<ul> <li>W03-2: Analysis and Design of Problems/Questions in the Digital Environment: The 17th Workshop on Technology Enhanced Learning by Posing/Solving Problems/Questions</li> <li>Session Chair: Shitanshu MISHRA</li> <li>W03-004: Difficulty-Controllable Reading Comprehension Question Generation Considering the Difficulty of Reading Passages Yuto TOMIKAWA &amp; Masaki UTO</li> <li>W03-006: Iterative Problem Solving in the Integration of Design Thinking and Game-Based Learning into Enhancing Computational Thinking and Al Literacy Tai-Ping HSU &amp; Ting-Chia HSU</li> <li>W03-007: Design and Development of a Stepwise Learning Environment for Problem Posing of Arithmetic Word Problem Yusuke HAYASHI, Nagito YAMAMOTO, Susumu SHIMAKAWA &amp; Tsukasa HIRASHIMA</li> </ul>	The Hive
	<ul> <li>W08-2: The 12th Workshop on Technology-Enhanced STEM Education         (TeSTEM Workshop)</li> <li>Session Chair: Pawat CHAIPIDECH</li> <li>W08-002F: Predicting Emotional Impact on Peer Review, Peer Assessment,         and Self Assessments Using Deep Learning and NLP in STEM Education         Pascal Muam MAH</li> <li>W08-008F: Leveraging Generative AI for Automatic Scoring in Chemistry         Education: A Web Based Approach to Assessing Conceptual         Understanding of Colligative Properties</li> </ul>	JJ Atencio Lighthouse

Sri YAMTINAH, Dimas Gilang RAMADHANI, Antuni WIYARSI, Hayuni Retno

**W08-010S**: Fostering TPACK Self Efficacy Among Pre-Service Chemistry

Anggiyani Ratnaningtyas Eka NUGRAHENI & Niwat SRISAWASDI

WIDARTI & Ari Syahidul SHIDIQ

Teachers: A Case Study from Indonesia



Monda	y, 25 November 2024	
10:50 to 12:20	<ul> <li>W09-2: The 4th Workshop on Innovative Technologies for Enhancing Interactions and Learning Motivation</li> <li>Session Chair: Tzu-Chi YANG</li> <li>W09-006F: Transforming Student Feedback into Institutional Action Plans:         <ul> <li>A Data-Driven Approach</li> <li>Arlene Mae CELESTIAL VALDERAMA</li> </ul> </li> <li>W09-008F: BioMol DigiGames: An App for the Mastery of Biomolecules         <ul> <li>Joshua TUMOLVA, Armando Victor GUIDOTE, John Lorence VILLAMIN &amp;</li> <li>Joselito Christian Paulus VILLANUEVA</li> </ul> </li> <li>W09-009S: The Era of Learning Programming Through Program:         <ul> <li>Challenges and Potential of ChatGPT in Revolutionizing High School Programming Education</li> <li>Tzu-Chi YANG</li> </ul> </li> <li>W09-010S: Code Visualization System for Writing Better Code Through         <ul> <li>Trial and Error in Programming Learning: Classroom Implementation and Practice</li> <li>Shintaro MAEDA, Kento KOIKE &amp; Takahito TOMOTO</li> </ul> </li> <li>W09-011S: Optimization of Non-Verbal Information for English         <ul> <li>Conversation Agents Using Interactive Evolutionary Computation</li> <li>Yuma SHIMOSAKA, Emmanuel AYEDOUN &amp; Masataka TOKUMARU</li> </ul> </li> </ul>	Campos Interactive Teaching Lab
12:20 to 13:20	<b>Lunch</b> 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 17:00	IEO1: Interactive Event-1 Educ-AI-tion: Bridging Divides with Educational GenAI Ahmad Salahuddin MOHD HARITHUDDIN, Nurul Amelina NASHARUDDIN, Nur Aira ABDRAHIM, & Mas Nida MD KHAMBARI Universiti Putra Malaysia, Malaysia	The Loft
	IE02: Interactive Event-2 Improving Learning through Information Organization Using Kit-Build Concept Map Rian FITRIANSYAH & Lintang Matahari HASANI Hiroshima University, Japan	Doreen Black Box
	TU01: Tutorial 1 Leveraging Deep NLP for Agentic LLM Use in Teaching and Learning Michelle BANAWAN Asian Institute of Management, Philippines	The Hive



Monda	y, 25 November 2024	
13:20 to 17:00	<ul> <li>W08-3: The 12th Workshop on Technology-Enhanced STEM Education (TeSTEM Workshop)</li> <li>Session Chair: Anggiyani Ratnaningtyas Eka NUGRAHENI</li> <li>W08-003F: Math Learning Application on Mobile Devices Following the STEAM Educational Model         <i>Nguyen-Manh THANG &amp; Pham-Duc THO</i></li> <li>W08-01IF: Does Interactive Augmented Reality Enhance Primary Students'         Geometric Understanding and Visual-Spatial Skills in Mathematics         Learning?         Atcharaporn ASSAWAPHUM, Sasivimol PREMTHAISONG &amp;         Pawat CHAIPIDECH</li> <li>W08-007S: Promoting Quantitative Analysis in School Chemistry with         Technology-Supported Hands-On Laboratory Learning: A Case of         Arduino-Based Portable Spectrophotometer         Ari Syahidul SHIDIQ, Fa'ari SALSABIILA, Sri YAMTINAH, Sri MULYANI,         Murni RAMLI, Hayuni Retno WIDARTI &amp; Nahadi</li> </ul>	JJ Atencio Lighthouse
	W09-3: The 4th Workshop on Innovative Technologies for Enhancing Interactions and Learning Motivation Session Chair: Yanjie SONG W09-012S: Exploring the Benefits of Strategic Hesitations in Language Learning Robots Ryusei AZUMA, Emmanuel AYEDOUN & Masataka TOKUMARU W09-013S: Zooming In on Educator Well-Being: Exploring Behavior Attributes, Zoom Fatigue, and Burnout Dynamics Kevynn DELGADO, Mary Rose MARTINEZ, Christine Jamela VALSADO & Ryan EBARDO W09-014S: The Effect of Collaborative Anchoring on the Development of Digital Curation Skills Among Nursing College Students Chun-Hao CHANG W09-015F: Enhancing Health Education and Learning Motivation in Primary Students Through Augmented Reality and Game-Based Learning: A Case Study Nattapat BUNYUEN, Sasivimol PREMTHAISONG & Pawat CHAIPIDECH W09-016S: Improving Engagement in Museums Through Virtual Reality Educational Escape Rooms (VREER): A Framework and Usability Study 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 W09-017S: Explore the Effect of Metacognitive Awareness on University Students' Learning Outcomes in the Metaverse: Evidence from Eye-Tracking Data Tinghui WU, Yanjie SONG & Xuesong ZHAI	Campos Interactive Teaching Lab
14:50 to 15:10	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



#### Monday, 25 November 2024

15:10 to 17:00 **W08-4**: The 12th Workshop on Technology-Enhanced STEM Education (TeSTEM Workshop)

JJ Atencio Lighthouse

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, Ghaitsa 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



# Tuesday, 26 November 2024

Tuesda	uesday, 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	Doreen Black Box	
	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		
	<ul> <li>DSC-1: Doctoral Student Consortium</li> <li>Session Chair: Feng LIN</li> <li>244: Real-Time Adaptive Learning Environments Using Gaze and Emotion Recognition Engagement and Learning Outcomes <ul> <li>AboulHassane CISSE</li> </ul> </li> <li>254: Developing a Multimodal Learning Analytics Approach for Collaborative Learning and Metacognitive Strategies in Virtual Learning Environments for Primary Science Education <ul> <li>Lei TAO &amp; Yanjie SONG</li> </ul> </li> <li>223: Competition and Collaboration: A Multi-Modal Analysis of Cognitive Load and Behavior Patterns in Game-Based Learning <ul> <li>Lishan ZHENG &amp; Wenli CHEN</li> </ul> </li> </ul>	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	



Tuesdo	ıy, 26 November 2024	
09:00 to 10:30	<ul> <li>W06-1: GenAI in Education - From Hallucinations to Reality:         Integrating Learning Analytics and Generative AI for Enhancing Personalized Learning Experiences     </li> <li>Session Chair: Yiling DAI</li> <li>W06-001F: Analyzing Teacher-Student Dialogues in Online One-on-One Primary Mathematics Tutoring: A Lag Sequential Analysis of Group Differences         Gary CHENG, Bo JIANG, Daner SUN, Ming GAO &amp; Zhixuan SONG     </li> <li>W06-004F: Supporting Teacher-Student Book Talk and Book Wish Lists with AI-Driven Technology         Chih-En KUO, Hong-Min TU, Chang-Yen LIAO &amp; Tak-Wai CHAN     </li> <li>W06-005F: AVERY: A GenAI-Based Approach to Enhancing Learner Engagement in English Writing         Ka-Lai WONG, Patrick OCHEJA, Brendan FLANAGAN &amp; Hiroaki OGATA     </li> <li>W07-1: The 7th Workshop on Predicting Performance Based on the</li> </ul>	JJ Atencio Lighthouse
	Analysis of Reading and Learning Behavior  W07-001F: Exploring Cross-Disciplinary Education: Enhancing Science Learning with Digital Picture Books Yan-Yu JAU & Joni Tzuchen TANG  W07-002F: Methods of Balancing Model Explainability and Performance in Identifying At-Risk Students Tiffany T.Y. HSU, Brendan FLANAGAN & Owen H.T. LU	Interactive Teaching Lab
10:30 to 10:50	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
10:50 to 12:20	<ul> <li>W02-2: The 13th International Workshop on ICT Trends in Emerging Economies (WICTTEE 2024)</li> <li>Session Chair: Ryan EBARDO</li> <li>W02-014F: Exploring Skills Enhancement in Student Teacher Through Implementation of Design Thinking in Unplugged Game Creation Tian Wong LING, Mas Nida Md. KHAMBARI, Mohd Mokhtar MUHAMAD, Sharifah Intan Sharina Syed-ABDULLAH &amp; Saiful Hasley RAMLI</li> <li>W02-017F: Factors Influencing ChatGPT Use Behaviour Among Trainee Teachers</li> <li>Sarala VALAIDUM &amp; Jazihan MAHAT</li> <li>W02-009S: Design and Implementation of an Educational Escape Rooms Class</li> <li>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 &amp; Maria Mercedes T. RODRIGO</li> </ul>	Doreen Black Box



Tuesda	y, 26 November 2024	
10:50 to 12:20	<ul> <li>DSC-2: Doctoral Student Consortium</li> <li>Session Chair: Alwyn Vwen Yen LEE</li> <li>253: A Proposal for a Quantitative Evaluation Model for Error Image Generation in L2 Vocabulary Learning Kazuki SUGITA, Wen GU, Koichi OTA, Prarinya SIRITANAWAN &amp; Shinobu HASEGAWA</li> <li>212: Development and Validation of a Problem-Solving Instrument (Multiple-Choice Questions) for Computational Thinking Among Trainee Teachers in the Klang Valley, Malaysia Ahmad Sarji Abdul HAMED, Su Luan WONG &amp; Mohd Zariat Abdul RANI</li> <li>217: OKLM: Open Knowledge and Learner Model Using Educational Big Data Kensuke TAKII, Changhao LIANG &amp; Hiroaki OGATA</li> </ul>	The Loft
	W04-2: The 8th Computer-Supported Personalized and Collaborative Learning Session Chair: Chin-Jung CHEN W04-013F: Investigation of Skills Training System Using TF-IDF for the Plasterer's Skeletal Data Ryota TANAKA, Naka GOTODA, Lee SAERON, Ryo KANDA, Ayaka HUNABIKI, Hirotake KANISAWA, Kanae KANDA, Yuka TAKAI & Toshihiro HAYASHI W04-002S: The Trends in Computer-Supported Virtual Reality Collaborative Learning Ching-Yi CHANG & Cheng-Huan CHEN 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 De Jun MO & Joni Tzuchen TANG	The Hive
	W06-2: GenAl in Education - From Hallucinations to Reality: Integrating Learning Analytics and Generative Al for Enhancing Personalized Learning Experiences Session Chair: Patrick OCHEJA Panel Discussion	JJ Atencio Lighthouse
	<ul> <li>W07-2: The 7th Workshop on Predicting Performance Based on the Analysis of Reading and Learning Behavior</li> <li>W07-003F: Effects of the Self-Regulated Learning and Motivation on Learning Achievements of the Programming Courses Mu-Sheng CHEN &amp; Ting-Chia HSU</li> <li>W07-004F: GazeViz: A Web-Based Approach for Visualizing Learner Gaze Patterns in Online Educational Environment Eduardo DAVALOS, Namrata SRIVASTAVA, Yike ZHANG, Amanda GOODWIN &amp; Gautam BISWAS</li> </ul>	Campos Interactive Teaching Lab
12:20 to 13:20	<b>Lunch</b> 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



Tuesday, 26 November 2024

13:20	<b>W02-3</b> : The 13th International Workshop on ICT Trends in Emerging	Doreen Black
to	Economies (WICTTEE 2024)	Box
14:50	Session Chair: John Byron TUAZON	
	<b>W02-002S</b> : A Preliminary Investigation of the Definition and Components	
	of Computational Thinking in the Malaysian Education Landscape: From	
	Educational Technology Experts' Perspective	
	Ahmad Sarji Abdul HAMED, Su Luan WONG, Mohd Zariat Abdul RANI,	
	Mas Nida Md KHAMBARI, Nur Aira Abd RAHIM, Fariza KHALID &	
	Priscilla MOSES	
	<b>W02-006S</b> : PERS: A Personalized Recommender System for	
	Student-Generated Questions in Programming Courses	
	Pham-Duc THO	
	<b>W02-010S</b> : A User Acceptance Testing Tool for Mobile Game-Based	
	Learning Application	
	Christian Jade D. GUILLEN & Saturnina F. NISPEROS	
	<b>W02-016S</b> : Sociotechnical Challenges of Older Educators in Delivering Medical Education Online	
	Ryan EBARDO, John Byron TUAZON & Miriam Louella FERMIN	
	RYUH EBARDO, JOHN BYTON TOAZON & MINUTH LOUGHU FERMIN	
	<b>DSC-3</b> : Doctoral Student Consortium	The Loft
	Session Chair: Feng LIN	
	<b>248</b> : Exploring the Young Learners' Interactions with Al-Generated	
	Multimodal Feedback in Collaborative Writing	
	Xinyu GUO	
	<b>241</b> : The Bane of AI in Teaching: Innovation Resistance in Higher Education	
	Instructional Design & Delivery	
	Estefanie BERTUMEN & Ethel ONG	
	Discussion	
	<b>W04-3</b> : The 8th Computer-Supported Personalized and Collaborative	The Hive
	Learning	
	Session Chair: Jonathan Y. CHIN	
	<b>W04-012F</b> : Addressing Public Speaking Anxiety with an Al Speech Coach	
	Frederick Voltair GARCIA Jr., Nicanor Froilan PASCUAL,	
	Miguel Elijah SYBINGCO & Ethel ONG	
	<b>W04-005S</b> : 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	
	Wen-Lung HUANG & Chia-Jung CHANG WOA-0105: Developing an LIM-Empowered Agent to Enhance Student	
	<b>W04-010S</b> : Developing an LLM-Empowered Agent to Enhance Student  Collaborative Learning Through Group Discussion	
	Sixu AN, Yicong LI, Yu YANG, Yunsi MA, Gary CHENG & Guandong XU	
	SING AIN, FIGURE E, TO TAINO, TOTAS WIA, GULY CHEING & GUOTIONING NO	



Tuesdo	y, 26 November 2024	
13:20 to 14:50	<ul> <li>W06-3: GenAl in Education - From Hallucinations to Reality:         Integrating Learning Analytics and Generative Al for Enhancing Personalized Learning Experiences     </li> <li>Session Chair: Tzu-Chi YANG</li> <li>W06-007F: How Al Supports Returning Adult Learners in a Developing Economy: Enhancing Academic Writing Through Self-Determination Theory         Mary Rose MARTINEZ &amp; Ryan EBARDO     </li> <li>W06-009F: Developing a Multimodal Learning Analytics Approach to Examine Students' Cognitive Presence and Metacognition in a Metaverse Environment         Yanjie SONG, Lei TAO, Hao DENG &amp; Jiachen FU     </li> <li>W06-010F: Integrating ChatGPT into Flipped Learning: Enhancing Students' Creative Writing Skills and Perception</li> <li>Worapong KHUIBUT, Sasivimol PREMTHAISONG &amp; Pawat CHAIPIDECH</li> </ul>	JJ Atencio Lighthouse
13:20 to 17:00	SW: Student Wing Chair: Yanjie SONG, The Education University of Hong Kong Introduction Topic: Get Your Research Published: Essential Tools and Strategies Yin YANG, The Education University of Hong Kong Q&A Session Topic: Unlock Your Early Career Success: Tips and Opportunities for Securing Grants Shurui BAI, The Education University of Hong Kong Q&A Session Interactive Session Closing	Campos Interactive Teaching Lab
	TU02: Tutorial 2  Designing Learning Experiences for Science, Technology, Engineering and Mathematics (STEM) Education using Minecraft  Dominique Marie Antoinette MANAHAN & Louise Marie TULAYBA  Ateneo de Manila University, Philippines	Assemble at Ubuntu Space
14:50 to 15:10	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



Tuesda	y, 26 November 2024	
15:10 to 17:00	<ul> <li>W02-4: The 13th International Workshop on ICT Trends in Emerging Economies (WICTTEE 2024)</li> <li>Session Chair: Ryan EBARDO</li> <li>W02-013S: Minecraft as a Tool for Digital Game-Based Learning:</li></ul>	Doreen Black Box
	DSC: Doctoral Student Consortium  Discussion	The Loft
	W04-4: The 8th Computer-Supported Personalized and Collaborative Learning Session Chair: Chia-Jung CHANG W04-006S: Exploring the Effect of Collaborative Programming Learning Environment on Student's Computer Programming Competencies and Cognitive Learning Chia-Jung CHANG & Wen-Lung HUANG W04-009S: Investigating the Impact of Kahoot! On EFL Grammar Learning Jonathan Y. CHIN & Ben CHANG W04-01IS: Designing an LLM-Based Dialogue Tutoring System for Novice Programming Julieto PEREZ & Ethel ONG	The Hive
	<ul> <li>W06-4: GenAl in Education - From Hallucinations to Reality: Integrating Learning Analytics and Generative Al for Enhancing Personalized Learning Experiences</li> <li>Session Chair: Owen LU</li> <li>W06-011F: Competency-Based Assessment in the Era of Generative Artificial Intelligence: Perspectives of Selected STEM Educators Friday Joseph AGBO, Heather Kitada SMALLEY &amp; Kathryn NYMAN</li> <li>W06-006S: A Case Study for Educators with ChatGPT and Plato's Allegory of the Cave Anna Y.Q. HUANG, Jain-Wei TZENG, Chi-Sheng HUANG, Zhi-Qi LIU, Bryan Carl TANUJAYA &amp; Owen H.Q. LU</li> <li>W06-008S: Supporting Students' Post-Exam Reflection Needs in College Automation Engineering Course Using LLM Edward ANOLIEFO, Patrick OCHEJA, Regina OCHONU, Brendan FLANAGAN &amp; Hiroaki OGATA</li> </ul>	JJ Atencio Lighthouse
17:00 to 19:30	Welcome Reception	Ubuntu Space



# 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)

ES	Extended Summary (9 minutes presentation + 5 minutes Q&A)			
Wedne	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: <i>Dragan GAŠEVIĆ</i> Getting Ready for the Age of Al: 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 Lung-Hsiang WONG, Yun WEN, Vivian Wen-Chi WU, Yoshiko GODA & Ting-Chia HSU	Hyundai Hall		
	<ul> <li>ALT-1</li> <li>Session Chair: Ashwin T. S.</li> <li>64F: Proficiency Modeling in Junior High Math: Adapted Cognitive Statistical Models to E-Book Learning Contexts  Changhao LIANG, Kensuke TAKII &amp; Hiroaki OGATA</li> <li>98F: An Embodied Projection Recognition System for Situated Learning to Enhance Learning Effectiveness and Self-Reflection Ability  Hui-Ting LIU, Zi-Ting DING, Su-Hang YANG, Jian-Yu WU, Jen-Hang WANG, Po-Yao CHAO, Yung-Yu ZHUANG &amp; Gwo-Dong CHEN</li> </ul>	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" Manabu ISHIHARA, Izumi HORIKOSHI & Hiroaki OGATA 75F BTDPN: Marrying Physical and Virtual Realms: An Embodied, Multi-Modal Approach to Situational Learning in Digital Reality 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	The Loft		



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



Wedne	sday, 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 Hanyu ZHAO, Yuzhuo WU, Yang YU, Xiaohua YU & Liangyu CHEN  106S: Availability and Effectiveness of Generative AI for Web-Based Investigative Learning Yutaka WATANABE & Akihiro KASHIHARA  122S: Developing a LLMs-Driven System Based on Human-AI Progressive Code Generation Framework to Assist Mathematics Learning Chun Yan Enoch SIT, Yin YANG, Wing Kei YEUNG & Siu Cheung KONG	The Hive
	TELL-1 Session Chair: Brendan FLANAGAN  123F BSPN: TAMMY: Supporting EFL Translation Practice with an LLM-Powered Chatbot Steve WOOLLASTON, Brendan FLANAGAN, Patrick OCHEJA, Yiling DAI & Hiroaki OGATA  172F BTDPN: Impact of Online Video Dubbing Activities on Grade 5 Students' Pronunciation, Accuracy, and Fluency in English Speaking: An Experimental Research Min XIE & Alex Wing Cheung TSE	JJ Atencio Lighthous
	CSCL-1 Session Chair: Cheng-Huan CHEN 31F: Unveiling the Interplay of Students' Epistemic Emotions and Knowledge Building Activities in Design Studios Alwyn Vwen Yen LEE, Chew Lee TEO, Aloysius ONG & Katherine YUAN 144F BOPN, BSPN: MESHing Minds: Bridging the Gap Between Creativity and IoT Programming Through Collaborative Mixed Reality Yusuke SAKABE, Emmanuel AYEDOUN & Masataka TOKUMARU	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 Fu-Yun YU, Tak-Wai CHAN, Sahana MURTHY, Su Luan WONG, Wenli CHEN, Hyo-Jeong SO & Hiroaki OGATA	Hyundai Hall



Vedne	sday, 27 November 2024	
Vedne 15:20 to 16:50	ALT-3 Session Chair: Ashwin T. S.  97F: Analyzing Student Behavior in Viat-Map: Steps and Time as Performance Indicators Banni Satria ANDOKO, Vivin Ayu LESTARI, Agung Nugroho PRAMUDHITA, Amalia NURAINI, Inda Khoirun NISAK & Tsukasa HIRASHIMA  113F: Comparison of Learners' Self-Direction Behavior Across Contexts and Phases Junya ATAKE, Chia-Yu HSU, Huiyong LI, Izumi HORIKOSHI, Rwitajit MAJUMDAR & Hiroaki OGATA  131S: Progressive Behavior Patterns of Online Discussion at Different Circle of Self-Regulated Learning Shih-Hua HUANG, De-Yu SHIAU, Yung-Sian FANG & Ting-Chia HSU  143S: Forest/CR: Critical Paper Reading Support System Tomoya KII, Kazuhisa SETA & Yuki HAYASHI	Doreen Black Box
	<ul> <li>EGG-1</li> <li>Session Chair: Hyo-Jeong SO</li> <li>16F BSPN: Design and Evaluation of the Usability of a Game-Based Learning Application for Learners with Dyslexia Vincent GARCIA, Arnel OCAY, Joshua PERADILLA, Mary Rose SAGUIPED &amp; Myla Karen ARENAS</li> <li>72F: Comparing Effects of Adaptive Gamification and One-Size-Fits-All Gamification on Students' Task Completion Process and Learning Performance Shurui BAI &amp; Yingxue LIU</li> <li>162F BOPN: Dialogue Game-Based Learning for Al Ethics Education Hyo-Jeong SO &amp; Sung-Eun KIM</li> <li>125S: Detecting Off-Task Behavior of Learners in Minecraft Using Exploration and Personalized Features Maricel A. ESCLAMADO &amp; Maria Mercedes T. RODRIGO</li> </ul>	The Loft
	Session Chair: May Marie TALANDRON-FELIPE  175F: Evaluating the Performance of Copula-Based Item Response Theory Models for Interpretable Assessment  Eduardo GUZMÁN & Eva MILLÁN  80S: Enhancing Diversity in Difficulty-Controllable Question Generation for Reading Comprehension via Extended T5  Teruyoshi GOTO, Yuto TOMIKAWA & Masaki UTO  190S: The Effect of Feature Reliability on the Generalization of Machine Learning Models in Educational Data  Yingbin ZHANG  258ES: Exploring High School Students' Transition from Traditional Search Engines to ChatGPT for Course Learning: A Push-Pull-Mooring Model Perspective  Chien-Liang LIN, Chih-Yu YANG, Pei-Chi WU, Yu-Cheng LIN & Chi-Heng LI  266ES: Exploring Dialogue Patterns in Argumentation with Pre-Set ChatGPT Personas  Seunmin EUN & Seonmin JIN	The Hive



Wedne	sday, 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 Taisei YAMAUCHI, H. Ulrich HOPPE, Yiling DAI, Brendan FLANAGAN & Hiroaki OGATA 65: Factors Contributing to the Negative Online Learning Academic Self-Concept of College Students Rex BRINGULA, Roman Paulo BAET, Ralph Lawrence GARCIA, Franchesca Mari MORALES, Jan Carlo RAMOS, Hanna Sophia SARMIENTO & Edmon TORRES 75: Teachers' Perspectives on Integrating AI Tools in Classrooms: Insights from the Philippines Vanessa B. SIBUG, Vicky P. VITAL, John Paul P. MIRANDA, Emerson Q. FERNANDO, Almer B. GAMBOA, Hilene E. HERNANDEZ, Joseph Alexander BANSIL, Elmer M. PENECILLA & Dina D. GONZALES 105: Research on the Dual-Pathway Impact of Artificial Intelligence Technology on Teachers' Human-Machine Collaboration Yujie XU & Yiling HU 305: Does Learning Interest Predict Academic Performance in an Interest-Driven HyFlex Course? Liang Jing TEH, Su Luan WONG, Mohd Zariat ABDUL RANI, Mas Nida MD KHAMBARI & Sai Hong TANG	JJ Atencio Lighthouse
	SIG 2 Community Building (CB) Session  Computer-Supported Collaborative Learning and Learning Sciences  (CSCL)  Chair: Lenka SCHNAUBERT, 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)	



# Thursday, 28 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)

	Externation currently (o trimated proportion of trimated query)	
Thursd	lay, 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 Weiqin CHEN, Jon MASON, Faisal BADAR, Shitanshu MISHRA & Maria Mercedes T. RODRIGO	Hyundai Hall
	<ul> <li>ALT-4</li> <li>Session Chair: Yilling DAI</li> <li>4S: Exploring the Relationship of Personality Domains and Visual Attention Patterns in Novice Programmers  Caren PACOL, Maria Mercedes RODRIGO &amp; Christine Lourrine TABLATIN</li> <li>35S: Construction of a Japanese Language Learning Support System That Enables Word Accent Learning  Satoru KOGURE, Kazuki TOMITA, Yasuhiro NOGUCHI, Koichi YAMASHITA, Tatsuhiro KONISHI &amp; Makoto KONDO</li> <li>41S: Developing a Feedback Analytic Tool to Support Instructor Reflection Feng LIN, Chenchen LI, Rebekah Wei Ying LIM &amp; Yew Haur LEE</li> <li>139S: Effect of Re-Composition Concept Mapping for Sharing Reference Maps on Serial Concept Mapping: A Preliminary Study Rian FITRIANSYAH, Harry Budi SANTOSO, Lia SADITA, Baginda Anggun Nan CENKA, Syifa NURHAYATI, Yusuke HAYASHI &amp; Tsukasa HIRASHIMA</li> </ul>	Doreen Black Box



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



	MANILA, PHILIPPINES	
Thursdo	ay, 28 November 2024	
14:00 to 15:30	ALT-5 Session Chair: Banni Satria ANDOKO 48F BTDPN: Designing Recommendations for Productive Learning Habit-Building from Learning Logs Chia-Yu HSU, Izumi HORIKOSHI, Huiyong LI, Rwitajit MAJUMDAR & Hiroaki OGATA	Doreen Black Box
	<ul> <li>101F: Designing Interaction Scenario for Alleviating Persistence in Learning Strategies</li> <li>So SASAKI &amp; Akihiro KASHIHARA</li> <li>166F: Enhancing Vocational Training Through Immersive Technology: <ul> <li>A Study on Digital Magic Mirrors</li> <li>Jen-Hang WANG, Hung-Wei TSENG, Su-Hang YANG, Chih-Kai CHANG, Yung-Yu ZHUANG &amp; Gwo-Dong CHEN</li> </ul> </li> <li>145S: Facilitating Thinking like a Historian in Open-Ended Learning Space: <ul> <li>A White Box Approach</li> <li>Aoi MATSUURA, Yuki HAYASHI &amp; Kazuhisa SETA</li> </ul> </li> </ul>	
	CSCL-2 Session Chair: Ben CHANG  52S: Students' Verbal Interaction Patterns in Computer-Supported Collaborative Learning: The Role of Individual Preparation Wenli CHEN, Lishan ZHENG, Mei-Yee Mavis HO, Qianru LYU, Hua HU & Zirou LIN  88S: Enhancing Social Learning in Active Video Watching Ehsan BOJNORDI, Antonija MITROVIC, Matthias GALSTER, Sanna MALINEN, Jay HOLLAND & Negar MOHAMMADHASSAN  124S: Rethinking Trust in Human-Al Collaboration in the Generative Al Era Yijie LU & Bo JIANG  147S: Infrastructuring for Collective Cognitive Responsibility: A Case Study of Student Knowledge Building Design Studio Chew Lee TEO, Aloysius ONG, Alwyn LEE, Guangji YUAN & Kennedy LOO  148S: Review of Different Assessment Methods Used by Online Inquiry-Based Learning Systems That Support Argumentation Nitesh Kumar JHA, Plaban Kumar BHOWMIK & Kaushal Kumar BHAGAT  200S: Investigating Secondary School Students' Academic Emotions in Data Science Learning Gaoxia ZHU, Chew Lee TEO, Guangji YUAN, Chin Lee KER, Aloysius ONG & Alwyn Vwen Yen LEE	The Loft
	EGG-2 Session Chair: Jie-Chi YANG 65F BTDPN: A Robot-Assisted Scenario Training for Students with ASD Ka Yan FUNG, Kwong Chiu FUNG, Tze-Leung Rick LUI, Feifan PANG, Huamin QU, Shenghui SONG & Kuen Fung SIN 103F: Exploring the Impact of Incorporating Digital Escape Room on Learners' Performance and Motivation in Environmental Sustainability Education Yu-Chao LAI & Jie-Chi YANG 133S: Middle School Students' Ability to Detect Lies When Interacting with	The Hive

an Educational Al Robot

Ahmed SALEM & Kaoru SUMI



Thursd	ay, 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 Junya ATAKE, Chia-Yu HSU, Izumi HORIKOSHI & Hiroaki OGATA  146F: Driving Informed EdTech Quality Decisionmaking: A Research-Practice Partnership-Based Solution for Diverse Stakeholders' Needs Ishika ISHIKA, Angelina Susan PHILIP, Sheeja VASUDEVAN & Sahana MURTHY  20S: Determinants of ChatGPT Adoption in Academe & Other Fields – A Review on Theoretical Perspective Gerand Boy O. ELINZANO & Michelle Renee CHING  171S: Exploring the Entanglement Between Technology and Pedagogy: A Case Study of Knowledge Building Yee Yin TAN, Seng Chee TAN & Chew Lee TEO	JJ Atencio Lighthouse
	SIG 10 Community Building (CB) Session Learning Analytics and Educational Data Mining (LAEDM) Chair: Ashwin T S, Vanderbuilt University, United States of America	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	<ul> <li>ALT-6</li> <li>Session Chair: Shinobu HASEGAWA</li> <li>91S: Boosting Course Recommendation Explainability: A Knowledge Entity Aware Model Using Deep Learning</li></ul>	Doreen Black Box



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in EFL eent ning: sting
JJ Atencio Lighthouse rs  Agility  RI,

**257ES**: The Impact of AI Literacy on Teacher Efficacy and Identity: A Study

of Korean English Teachers Seunmin EUN & Anna KIM



Thursde	Thursday, 28 November 2024		
16:50 to 17:50	( )	JJ Atencio Lighthouse	
	Poster Session 2	Innovation Lobby (2nd Floor)	
18:30 to 21:30	·	Leong Hall Roof Deck	



# Friday, 29 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)

LO	Extended Summary (3 minutes presentation + 3 minutes QQA)	
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	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  Lintang Matahari HASANI, Kasiyah JUNUS, Lia SADITA,  Tsukasa HIRASHIMA & Yusuke HAYASHI  77F BSPN: Automated Recommendations for Revising Lecture Slides Using Reading Activity Data  Erwin D. LOPEZ Z, Cheng TANG, Yuta TANIGUCHI, Fumiya OKUBO & Atsushi SHIMADA  40S: Optimizing Causal Inference Approach for Exploring Shallow Reading Behavior with Generative Adversarial Networks  Yu BAI, Fuzheng ZHAO, Wenhao WANG & Chengjiu YIN  60S: Exploring Linguistic Sophistication of Discussion Board Posts in University Learning Management Systems  Michelle P. BANAWAN, Clarence James MONTEROZO & Maria Mercedes T. RODRIGO  227ES: Toward Contextualized Handwriting Process Analysis: Comparison Between Problem Types in Math  Shunsuke TONOSAKI, Taito KANO, Satomi HAMADA, Izumi HORIKOSHI & Hiroaki OGATA	Doreen Black Box



Friday,	29 November 2024	
10:20 to 12:00	TEML-3/4 Session Chair: Sasipim POOMPIMOL  51F BOPN: Low vs. High Immersion in Metaverse-Based Learning: How Pre-Service Teachers Balanced Between Instruction and Assessment in Learning Design Darmawansah DARMAWANSAH, Dani PUSPITASARI & Gwo-Jen HWANG  160S: Participatory Design of an Al Digital Textbook with Deaf and Hard-of-Hearing Students Ga Young LEE, Jieun CHOI, Seonhee NA & Hyo-Jeong SO  161S: Technology Considerations in Building Virtual Educational Avatars Antun DROBNJAK & Ivica BOTICKI  194S: Data-Driven Peer Recommendation and Its Applications in Extracurricular Learning Peixuan JIANG, Changhao LIANG & Hiroaki OGATA	The Loft
10:20 to 11:10	AIED/ITS-6 Session Chair: Riichiro MIZOGUCHI  238ES: Personalized Comment Reviewing in Active Video Watching: Investigation of Learners' Cognitive Load Ehsan BOJNORDI, Antonija MITROVIC, Matthias GALSTER, Sanna MALINEN & Jay HOLLAND  251ES: AI-Driven Feedback for Enhancing Students' Mathematical Problem-Solving: The ScaffoldiaMyMaths System Daner SUN, Jingyun WANG, Lan YANG, Kee-lee CHOU, Zhixuan SONG & Zhizi ZHENG  259ES: A Study on High School Students' Continuance Intention to Use ChatGPT for Learning Assistance: An Exploration Based on Self-Determination Theory Chien-Liang LIN, Tian-Yun LIN, Shi-En LIN & Yu-Chen LIN	The Hive
	CSCL-3 Session Chair: Gaoxia ZHU  185F: Online Making-Based Learning at Scale: Towards Equity in STEM Learning Deeksha GAUTAM, Aditi KOTHIYAL, Rashmi SHEORAN, Neha GARG, Adithi IYER, Ashutosh BHAKUNI, Jay THAKKAR, Jyothi KRISHNAN & Manish JAIN  99S: Verbal Interaction Patterns in Online Collaborative Learning Design: Comparison of High Performing and Low Performing Groups Wenli CHEN, Lishan ZHENG, Mei-Yee Mavis HO, Hua HU & Qianru LYU	JJ Atencio Lighthouse



Friday,	29 November 2024	
11:10 to 12:00	<ul> <li>TELL-3</li> <li>Session Chair: Daria SINYAGOVSKAYA</li> <li>115S: Improve English Pronunciation at Word Level for Thai EFL Learners in Southern Region Using End-to-End Automatic Speech Recognition Nattapol KRITSUTHIKUL, Kongpop BOONMA, Jirapond MUANGPRATHUB, Wasan NA CHAI &amp; Thepchai SUPNITHI</li> <li>128S: Investigation on the Usage Status of a Support System for Writing English Paragraph Outlines in English Classes</li></ul>	The Hive
	PTP-6 Session Chair: Arlene VALDERAMA 183F: Constructing Desirable Learning Habits: Evidence from an Instructional System Design Course Based on the IDC Theory Anveshna SRIVASTAVA, Sandeep YADAV, Sahana MURTHY & Sridhar IYER 188F BSPN: Enhancing Language Learning Through Multimodal Al-Driven Feedback on Picture Descriptions: An Eye-Tracking Study Ruibin ZHAO, Zhiwei XIE, Yipeng ZHUANG, Huixian LI & Philip L. H. YU	JJ Atencio Lighthouse
12:00 to 13:00	<b>Lunch</b> 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	Session Chair: Anveshna SRIVASTAVA  9S: Code Tracing Support Environment Based on Visualization of Cooperative Behavior of Multiple-Flows Yasuhiro NOGUCHI, Kotaro SUNAMA, Satoru KOGURE, Raiya YAMAMOTO, Koichi YAMASHITA & Tatsuhiro KONISHI  90S: Peer Feedback Feature Analysis with Large Language Models: An Exploratory Study Qianru LYU, Zirou LIN & Wenli CHEN  214ES: Relationship Between Students' Scores in Weekly Tests and Final Exam Satomi HAMADA, Izumi HORIKOSHI & Hiroaki OGATA  218ES: Exploring Reading Speed Profiles in EFL Extensive Reading Hatsune ICHIDATE, Yiling DAI, Brendan FLANAGAN & Hiroaki OGATA	Doreen Black Box



Friday, 29 November 2024			
13:00	TELL-4	The Loft	
to	Session Chair: Leung Ho Philip YU		
14:00	<b>14S</b> : Enhancing Chinese Language Education Through Al-Assisted		
	Project-Based Learning: A Qualitative Study on Learning Values and		
	Multimedia Skills Development		
	Satoko SUGIE		
	<b>184S</b> : Development of a Chatbot and Evaluation of Its Effects on Learning and Intrinsic Motivation of a Public Secondary School's Spanish		
	Language Learners		
	Julian Eymard JANUBAS, Josiah Jose DEYSOLONG, Hanz Lucas ESTOPIA, Karl Mykell TABBAY & Jun Rangie OBISPO		
	<b>186S</b> : Enhancing Language Learning Through Multimodal Al-Driven		
	Feedback on Picture Descriptions: An Eye-Tracking Study		
	Ruibin ZHAO, Zhiwei XIE, Yipeng ZHUANG, Huixian LI, Philip L. H. YU		
	EGG-3	The Hive	
	Session Chair: Ming-Chi LIU		
	73S: ICCE 2024 FLOU: Evaluating the Intrinsic Motivation of Learners in		
	Gamifying Academic Programs Through a Gamified Mobile Application		
	Marl Vincent AGRAVANTE, Jeru Kian FERNANDEZ, Ma. Louisa PEREZ & Joshua MARTINEZ		
	<b>164S</b> : Designing an Educational Game for Facilitating Development of Media and Information Literacy		
	Jun XIE, Xiang LI, Kotomi HASEGAWA, Zhichun LIU & Frank REICHERT		
	<b>262ES</b> : Developing a Visualized Data Guessing Game to Assess Data		
	Literacy		
	Ruei-Yi XIE & Ming-Chi LIU		
14:15	Closing Ceremony	Hyundai Hall	
to			
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### **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 Al-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 Leaning-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

Hidenobu 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



### **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 GenAl 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

**202SAT**: Practical Skills Acquisition in Domestic Wiring as Determinants of Enterpreneurship Development Among Underdraduate Students in Nigeria

Ismaheel Adewale BADRU (Nigeria)

**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**: Al Tools Experience in Civitas Academic Portal in Timor Leste

Agostinho Dos Santos GONÇALVES, Sebastião PEREIRA & Saida ULFA (**Timor-Leste**)

**233SAT**: Al 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**: Al 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)



## **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, Tatsuhiro 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, Tatsuhiro 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 YAEGASHI

**156P**: Development of Laborer Digital Twin Generation and Visualization Function for Hazard Prediction in Off-Site Training

Kaito MINOHARA, Toshiki MUGURMA, 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