

PRICAI-2023 Technical Program

Wednesday, 15<sup>th</sup> November 2023

	PKAW 2023 (Workshop #1, Virtual Workshop) Mutiara 2&3	LLM4KG (Tutorial #1 Part 1) Mutiara 10	IMLH (Tutorial #2 Part 1) Mutiara 12	AI4Environment (Workshop #2) Mutiara 6&7	
9:00 - 10:30 (GMT+7)	<p>Keynote 1: "Game Theory and Machine Learning for Addressing Societal Challenges: From Theory to Real-World Impact" Prof. Fei Fang</p> <p>"Automated Cattle Behavior Classification using Wearable Sensors and Machine Learning Approach" Niken Prasasti Martono, Rie Sawado, Itoko Nonaka, Fuminori Terada, Hayato Ohwada</p> <p>"An Assessment of the Influence of Interaction and Recommendation Approaches on the Formation of Information Filter Bubbles" Zihan Yuan, Weihua Li, Quan Bai</p>	<p>Large Language Models and RDF-based Knowledge Graphs: Bridging the Gap (LLM4KG) Adrian Gschwend</p>	<p>Interpretable AI/ML Models for High-stake tasks with Human-in-the-loop (IMLH) Prof. Boris Kovalechuk</p>	<p>Session Chair: M A Hakim Newton (University of Newcastle)</p> <p>9:00-9:20 "Effective Water Source Monitoring (position paper)" Kewen Wang, Zhe Wang, Jarrod Trevathan, Kaile Su</p> <p>9:20-9:40 "Water Quality Monitoring with Artificial Intelligence - A Review on Recent Research" Md Khaled Ben Islam, M. A. Hakim Newton, Jarrod Trevathan, Abdul Sattar,</p> <p>9:40-10:00 "IoT-based interoperable smart aquaculture system for water quality monitoring" Tanzima Azad, Jarrod Trevathan, M A Hakim Newton, Abdul Sattar,</p> <p>10:00-10:20 "Listening for Frogs in Vulnerable Aquatic Environments" Linda Main</p> <p>10:20-10:40 "Federated Learning and Fog Computing for Remote Monitoring Applications" Blake Rawlins</p>	
30 mins	<i>Morning Tea</i>				
	PKAW 2023 (Workshop #1, Virtual Workshop) Mutiara 2&3	LLM4KG (Tutorial #1 Part 2) Mutiara 10	IMLH (Tutorial #2 Part 2) Mutiara 12	AI4Environment (Workshop #2) Mutiara 6&7	
11:00 - 12:30 (GMT+7)	<p>"Predicting Peak Demand Days for Asthma-Related Emergency Hospitalisations: A Machine Learning Approach" Rashi Bhalla, Farhaan Mirza, M. Asif Naeem, Amy Chan</p> <p>"Exploring the Potential of Image Overlay in Self-Supervised Learning: A Study on SimSiam Networks and Strategies for Preventing Model Collapse" Li Xiao, Weihua Li, Quan Bai, Minh Nguyen</p> <p>"LexiFusedNet: A Unified Approach for Imbalanced Short-text Classification using Lexicon-based Feature Extraction, Transfer Learning and One Class Classifiers" Saugata Bose, Guoxin Su</p> <p>"Balanced Graph Structure Information for Brain Disease Detection" Falih Febrinanto, Mujie Liu, Feng Xia</p>	<p>Large Language Models and RDF-based Knowledge Graphs: Bridging the Gap (LLM4KG) Adrian Gschwend</p>	<p>Interpretable AI/ML Models for High-stake tasks with Human-in-the-loop (IMLH) Prof. Boris Kovalechuk</p>	<p>Session Chair: Ashfaqur Rahman (CSIRO)</p> <p>11:00-11:20 "Deploying Gaussian Processes to Predict Avocado Price Fluctuations" Rishav Ranjan, Spandan Rout, Digvijay Jagtap</p> <p>11:20-11:40 "From Forest to Frame: Building a Koala Dataset and its Impact on Recognition Algorithms" Wangzhi Xing, Jun Zhou, Wee Lum Tan, Douglas Kerlin, Guy Castley, Jarrod Trevathan</p> <p>11:40-12:00 "Data-driven modelling of the influence of streamflow on prawn catch in northern Australia" Quanxi Shao, Simon Kitson, Rob Kenyon, Justin Hughes, Cuan Petheram, Louie Zhang</p> <p>12:00-12:20 "Deep learning water resource predictions across Australia incorporating hydrogeological knowledge" Stephanie Clark, Jasmine Jaffres</p>	
12:30 - 14:00 (GMT+7)	<b>Lunch</b>				

	<b>PKAW 2023 (Workshop #1, Virtual Workshop)</b> <b>Mutiara 2&amp;3</b>	<b>OBADI (Tutorial #3 Part 1)</b> <b>Mutiara 10</b>	<b>ISA (Tutorial #4 Part 1)</b> <b>Mutiara 12</b>	<b>COMPSOC (Tutorial #5 Part 1)</b> <b>Mutiara 6&amp;7</b>
14:00 - 15:30 (GMT+7)	Keynote 2: "Knowledge Structurization over Texts: Neural Information Extraction based Approaches and Recent Advances" Prof. Xiang Zhao  "Information Gerrymandering in Elections" Xiaoxue Liu, Shohei Kato, Fenghui Ren, Guoxin Su, Minjie Zhang, Wen Gu  "BeCB: Performance Benchmarking by Analysing Impacts of Cloud Platforms on Consortium Blockchain" Zhiqiang Huang, Saurabh Grag, Wenli Yang, Ankur Lohachab, Muhammad Bilal Amin, Byeong Kang	Ontology Based Data Access and Data Independence (OBDADI) Prof Dr. David Toman, Dr. Grant Weddell	Instance Space Analysis for Rigorous and Insightful Algorithm Testing (ISA) Kate Smith-Miles, Mario Andres Munoz	Computational Social Choice Competition (COMPSOC) A/Prof Rafik Hadfi
30 mins	<i>Afternoon Tea</i>			
	<b>PKAW 2023 (Workshop #1, Virtual Workshop)</b> <b>Mutiara 2&amp;3</b>	<b>OBADI (Tutorial #3 Part 2)</b> <b>Mutiara 10</b>	<b>ISA (Tutorial #4 Part 2)</b> <b>Mutiara 12</b>	<b>COMPSOC (Tutorial #5 Part 2)</b> <b>Mutiara 6&amp;7</b>
16:00 - 17:30 (GMT+7)	"Blockchain as a Collaborative Technology - Case Studies in the Real Estate Sector in Vietnam" Kha Nguyen Hoang, Trong Nguyen Duong Phu, Triet Nguyen Minh, Huong Hoang Luong, Khoa Tran Dang, Khiem Huynh, Phuc Nguyen Trong, Hieu Doan Minh, Quy Lu, Nguyen The Anh, Ngan Nguyen Thi Kim, Hien Nguyen Quang, Bang Le Khanh, Bao Tran Quoc, Khanh Vo Hong  "Discovering maximal high utility co-location patterns from spatial data" Vanha Tran  "Indonesian Forest Fire Data Clustering using Spatiotemporal Data Using Grid Density-Based Clustering Algorithm" Devi Fitriana, Hisyam Fahmi, Ade Putera Kemala, Muhammad Edo Syahputra	Ontology Based Data Access and Data Independence (OBDADI) Prof Dr. David Toman, Dr. Grant Weddell	Instance Space Analysis for Rigorous and Insightful Algorithm Testing (ISA) Kate Smith-Miles, Mario Andres Munoz	Computational Social Choice Competition (COMPSOC) A/Prof Rafik Hadfi

Thursday, 16<sup>th</sup> November 2023

	<b>PRIWAKG-2023 (Workshop #3) Mutiara 2&amp;3</b>	<b>Q2AI (Tutorial #6 Part 1) Mutiara 10</b>	<b>RL4DB (Tutorial #7 Part 1) Mutiara 12</b>	<b>DemocrAI2023 Winter (Workshop #4) Mutiara 6&amp;7</b>	<b>LAI (Tutorial #10 Part 1) Mutiara 17&amp;18</b>
<b>9:00 - 10:30 (GMT+7)</b>	<p>8:45 - 9:00: Opening Session</p> <p>9:00-10:00 "Shaping the Future of Health: A New Global Health Intelligence Architecture for Unlocking the Power of AI Through Knowledge Representation and Reasoning" Dusan Milovanovic (World Health Organization, Geneva, Switzerland)</p> <p>10:00-10:30 Demo "VocBench 3 &amp; ShowVoc: Towards an Open-source Ecosystem for Knowledge Management and Publication (Armando Stellato, Manuel Fiorelli, Andrea Turbati, Tiziano Lorenzetti)" Armando Stellato (University of Rome Tor Vergata, Italy)</p>	<p>Q2AI: A Quick Course to Quick AI Haryo Akbarianto Wibowo</p>	<p>Reinforcement Learning for Digital Business (RL4DB) Edwin Simjaya, Adhi Setiawan</p>	<p>Session Chair: Dr. Jawad Haqbeen (Kyoto University)</p> <p>9:00-9:30 Welcome &amp; Opening Remarks: Workshop Organizers</p> <p>9:30-10:30 Invited Talk 1 "Data quality as a prerequisite for the success and sustainability of emerging technologies, business, and society: no data quality, no party" Prof. Anastasija Nikiforova (University of Tartu, Estonia)</p>	<p>Current Interfaces of Logic and AI: the case of natural language (LAI) Johan van Benthem, Fenrong Liu</p>
<b>30 mins</b>	<i>Morning Tea</i>				
	<b>PRIWAKG-2023 (Workshop #3) Mutiara 2&amp;3</b>	<b>Q2AI (Tutorial #6 Part 2) Mutiara 10</b>	<b>RL4DB (Tutorial #7 Part 2) Mutiara 12</b>	<b>DemocrAI2023 Winter (Workshop #4) Mutiara 6&amp;7</b>	<b>LAI (Tutorial #10 Part 2) Mutiara 17&amp;18</b>
<b>11:00 - 12:30 (GMT+7)</b>	<p>11:00-12:00 "Choosing an Ontology for Re-use: Understanding the Standards Landscape" Mike Bennett (Hypercube Limited, United Kingdom)</p> <p>12:00-12:30 Use-Case "Modelling Autonomous Vehicle Driving information for Automatic Compliance Checking" Hanif Bhuiyan (Monash Data Futures Institute, Monash University)</p>	<p>Q2AI: A Quick Course to Quick AI Haryo Akbarianto Wibowo</p>	<p>Reinforcement Learning for Digital Business (RL4DB) Edwin Simjaya, Adhi Setiawan</p>	<p>Session Chair: Dr. Shun Okuhara (Mie University)</p> <p>11:00-12:00 Invited Talk 2: "Research on the development of an AI-based decision support system for elderly people with cognitive decline" Prof. Haruka Murai (Nihon Pharmaceutical University)</p> <p>12:00-12:30 "Investigation of Opinion Changes in Debate Judging Using Agents" Shun Okuhara, Takayuki Ito, Masanori Takagi</p>	<p>Current Interfaces of Logic and AI: the case of natural language (LAI) Johan van Benthem, Fenrong Liu</p>
<b>12:30 - 14:00 (GMT+7)</b>	<b>Lunch</b>				

14:00 - 15:30 (GMT+7)	<p><b>PRIWAKG-2023 (Workshop #3)</b> <b>Mutiara 2&amp;3</b></p> <p>13:30-14:30 "Harnessing the power of Semantics and Knowledge Graphs in IoT Data" Sanju Tiwari (BVICAM, New Delhi, India &amp; Universidad Autonoma de Tamaulipas, Mexico)</p> <p>14:30-15:00 Use-Case "Strengthening Data Governance and Trust: The Role of Semantic Web Technologies in the Age of Internet of Things and Large Language Models" Tek Raj Chhetri (Center for Artificial Intelligence (AI) Research Nepal)</p> <p>15:00 - 15:30 Use-Case "Rapid Knowledge Graphs: Knowledge Graph Extraction and Management (Omar Qawasmeh, Elena Manishina, Tiziano Flati, Fran_çois Bangui, and Benjamin Mathiesen)" Omar Qawasmeh (Hybrid Intelligence, Capgemini Engineering, France)</p>	<p><b>AIEDU (Tutorial #8 Part 1)</b> <b>Mutiara 10</b></p> <p>Applications of Generative AI tools in Higher Education (AIEDU) <i>Prof Eric Tsui</i></p>	<p><b>AlpaRa (Tutorial #9 Part 1)</b> <b>Mutiara 12</b></p> <p>Unleashing the Power of Large Language Models: A Comprehensive Tutorial on Training LLM using Alpaca + LoRA (AlpaRa) <i>Edwin Simjaya, Adhi Setiawan, Shinta Roudlotul Hanafia</i></p>	<p><b>DemocrAI2023 Winter (Workshop #4)</b> <b>Mutiara 6&amp;7</b></p> <p>Session Chair: Dr. Shun Okuhara (Mie University)</p> <p>14:00-14:30 "An Anthropology of Everyday AI Education in Indonesian Islam: A PhD Research Proposal" Daphne Wong-A-Foe</p> <p>14:30-15:00 "Assessing Conversational Agent Impact on Conversation Development and Changing People's Sentiments Towards Certain Entities: A Case Study with Warring Nations" Jawad Haqbeen, Sofia Sahab, Takayuki Ito</p> <p>15:00-15:30 "Towards Hyperdemocracy: An Multiagent Discussion System" Takayuki Ito, Rafik Hadfi, Jawad Ahmad Haqbeen, Sofia Sahab</p>	
30 mins	<i>Afternoon Tea</i>				
16:00 - 17:30 (GMT+7)	<p><b>PRIWAKG-2023 (Workshop #3)</b> <b>Mutiara 2&amp;3</b></p> <p>16:00-16:30 Demo "Graphologi Taxonomy and Ontology Management (Paul Appleby, Ravinder Singh, and Madi Solomon)" Paul Appleby (Graphifi Ltd, England)</p> <p>16:30-17:00 Demo "AllegroGraph - Chomsky chatbot based on Chomsky knowledge graph and LLM" Presenter: Sheng-Chuan Wu (Franz Inc., USA)</p> <p>17:00-17:30 Demo "TextDistil-Tool to Distil Knowledge from Language Using LLM" Prasad Yalamanchi (Lead Semantics, Inc., USA)</p> <p>17:30-17:45 Closing Session</p>	<p><b>AIEDU (Tutorial #8 Part 2)</b> <b>Mutiara 10</b></p> <p>Applications of Generative AI tools in Higher Education (AIEDU) <i>Prof Eric Tsui</i></p>	<p><b>AlpaRa (Tutorial #9 Part 2)</b> <b>Mutiara 12</b></p> <p>Unleashing the Power of Large Language Models: A Comprehensive Tutorial on Training LLM using Alpaca + LoRA (AlpaRa) <i>Edwin Simjaya, Adhi Setiawan, Shinta Roudlotul Hanafia</i></p>	<p><b>DemocrAI2023 Winter (Workshop #4)</b> <b>Mutiara 6&amp;7</b></p> <p>Session Chair: Dr. Shiyao Ding (Kyoto University)</p> <p>16:00-17:00 Tutorial "Towards Hyperdemocracy: AI-powered Crowd Discussion Support System" Prof. Takayuki Ito (Kyoto University, Japan)</p> <p>17:00-17:30 Awards and Closing Remarks</p>	