Conference Program

Auditorium, Silpakorn University,
Wang Tha Phra Campus

22 June 2022 Tutorial Day

Time	Title	Speaker
08.30-09.00	Register (Auditorium, fl.1)	
09.00-12.00	Where Are We and Where Should We Go? Software Quality Improvement for Software SMEs in Thailand (Main Auditorium, 304 fl.2)	ICT Team, Mahidol University
12.00-13.00	Lunch	
13.00-16.00	Quantum Computing (Main Auditorium, 304 fl.2) *Recommend joining with your laptop*	Prof Dr Prabhas Chongstitvatana Kamonluk Suksen Chulalongkorn University

23 June 2022 Conference Day

Time	Title		
08.30-09.00	Register (Auditorium, fl.1)		
09.00-09.30	Opening Ceremony (Main Auditorium, 304 fl.2)		
09.30-10.30	Keynote Speech (Main Auditorium, 304 fl.2) **Machine Learning for Detecting Code Smells** Prof.Marcello M. Bonsangue, LIACS of Leiden University, The Netherlands.		
10.30-10.45	Coffee Break		
10.45-12.05	Parallel Session1		
	Conf Room1 (304 fl.2) **Natural Language Processing (Text)**	Conf Room2 (305 fl.3) **Image Processing and Computer Vision**	Conf Room3 (303 fl.1) **Artificial Intelligence**
10.45-11.05	Identifying Significant Customer Opinion Information of Each Aspect from Hotel Reviews	Multi-directional Texture Feature Extraction for Glaucoma Classification from Color Retinal Images	Developing Autopilot Agent Transparency for Collaborative Driving
11.05-11.25	Tokenization-based data augmentation for text classification	Regularization Strategy for Multi-organ Nucleus Segmentation with Localizable Features	Wet Gas Pipeline Maintenance Process Using Reinforcement Learning
11.25-11.45	Hate Speech Detection in Thai Social Media with Ordinal-Imbalanced Text Classification	A Simplified Convolutional Neural Network Design for COVID-19 Classification on Chest X-ray Images	Categorize Level of Crystal Sugar Making with Recurrent Neural Network
11.45-12.05	Predicting Signs of Depression from Twitter Messages	Automated Clinical Assessment in Diabetic Retinopathy Retinal Images: A Review	Improved Generative Adversarial Networks for Intersection of Two Domains
12.05-13.00	Lunch		

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Time	Title		
13.00-14.40	Parallel Session2		
	Conf Room1 (304 fl.2) **Natural Language Processing (Text)**	Conf Room2 (305 fl.3) **Image Processing and Computer Vision**	Conf Room3 (303 fl.1) **Computer Education**
13.00-13.20	Automatic Thai Ticket Classification by Using Machine Learning for IT Infrastructure Company	Two-Dimensional Variational Mode Decomposition with Texture Feature Extraction for Glaucoma Classification from Retinal Images	Automatic Unit Testing-Based Assessments for Online C++ Programming Classroom
13.20-13.40	Multi-Label Classification for Articles in Thai Journal Database from Article's Abstract	A Computational Workflow for Estimation of Short RNA Polyadenylation using Direct RNA Nanopore Sequencing with Polyuridylation	Outcome Based Education: An Evaluation from SOs to PLOs
13.40-14.00	Thai Variable-Length Question Classification for E-Commerce Platform Using Machine Learning with Topic Modeling Feature	Fall Detection and Prediction Based on IMU and EMG Sensors for Elders	The Design and Development of an Adaptive Intelligent Tutoring System Based on Constructive Alignment and Cognitive Theories
14.00-14.20	Event Detection and Analysis in Thai News Using Bi-LSTM	The Development of Intelligent Models for Stress Detection towards Real-world Applications	Understanding Relationships among Learning Styles, Learning Activities and Academic Performance: From a Computer Programming Course Perspective
14.20-14.40	Sentiment Analysis of Thai Stock Reviews Using Transformer Models	AI-Assisted Diagnosis of Dyssynergic Defecation Using Deep Learning Approach on Abdominal Radiography and Symptom Questionnaire	
14.40-15.00	Coffee Break		
15.00-17.20	Parallel Session3		
	Conf Room1 (304 fl.2) **NLP (Text & Speech)**	Conf Room2 (305 fl.3) **Image Processing and Computer Vision**	Conf Room3 (303 fl.1) **Recommendation System**
15.00-15.20	Question Generation in the Thai Language Using MT5	A Novel Deep BiGRU-ResNet Model for Human Activity Recognition using Smartphone Sensors	Semantic-based Thai Recipe Recommendation
15.20-15.40	COVID-19 and Respiratory Diseases Classification using Deep Convolution Neuron Network	Convolution Neural Networks Backbone model for Citrus Leaf Disease Detection	Matching Corporate Software Engineers and Data Offerings - from Discovery to Recommendations

15.40-16.00	Breath sound classification by using the smartphone	Image classification based on multi-granularity convolutional Neural network model	Personalized Tourist Attraction Recommendation System Using Collaborative Filtering on Tourist Preferences
16.00-16.20	The deep learning models comparison for speaker identification and verification	Classifying Thai Occupation from Images using Deep Learning with Grayscale Feature Extractor	Player Recommendation System for Fantasy Premier League using Machine Learning
16.20-16.40	Thai Preschooler Speech Recognition for Voice Enabled Interactive Counting Exercises	Development of a face mask detection pipeline for mask-wearing monitoring in the era of the COVID-19 pandemic: A modular approach	A Hybrid Recommender System for Improving Rating Prediction of Movie Recommendation
16.40-17.00	Automatic Music Transcription for the Thai Xylophone played with Soft Mallets	Face Recognition Algorithms for Online and On-Site Classes	Recipe Recommendations for Toddlers Using Integrated Nutritional and Ingredient Similarity Measures
17.00-17.20			Developer Recommendation for Collaborative Open-Source Software Tasks Using Knowledge Graph Embedding
17.30-20.30	Welcome Reception/Banquet		

24 June 2022 Conference Day

Time	Title		
8.30-9.00	Register (Main Auditorium, 304 fl.2)		
9.00-10.00	Keynote Speech (Main Auditorium, 304 fl.2) **Quantum AI** Dr. Thiparat Chotibut Chula Intelligent and Complex Systems Lab, Chulalongkorn University		
10.00-10.25	Coffee Break		
10.25-12.05	Parallel Session4		
	Conf Room1 (304 fl.2) **Machine Learning and Algorithms**	Conf Room2 (305 fl.3) **Image Processing and Computer Vision**	Conf Room3 (303 fl.1) **Computer Networks and Communications**
10.25-10.45	Improving the Movie Showtime Scheduling Problem by Integrated Artificial Intelligence Techniques	Multi-Sensor Fusion with Extended Kalman Filter for Indoor Localization system of Multirotor UAV	Deep Learning Models for Daily Living Activity Recognition based on Wearable Inertial Sensors
10.45-11.05	Artificial Situation Awareness for an Intelligent Agent	Determining Natural Rubber Humidity Level using Rubber Color	AiRadar: A Sensing Platform for Indoor Air Quality Monitoring

11.05-11.25	Improved Particle Swarm Optimization using Evolutionary Algorithm	Quantitative Analysis of the 2D Tissue Skin Layer with Fluorescent Dyes	Elastic Fusion Dual-stage Spectrum Sensing for Random PU Accessing
11.25-11.45	The Distance-Based Selection Technique for Crossover in Genetic Algorithm	Human Detection and Social Distancing Measurement in a Video	Design and Development of A Cloud-Based IDS using Apache Kafka and Spark Streaming
11.45-12.05	A new Hybrid PSO-SCA using Horse Optimization Algorithm's group behavior update	Hydrophobic and Hydrophilic Insulator Surface Verification via Reforming Time Measurement with Centroid Tracking Technique	Improving of the Interference Classification Techniques under the Smart Farming Environment using iSVM
12.05-13.00	Lunch		
13.00-14.40	Parallel Session5		
	Conf Room1 (304 fl.2) **Time Series**	Conf Room2 (305 fl.3) **Software Engineering**	Conf Room3 (303 fl.1) **Computer Networks and Communications**
13.00-13.20	Multivariate time series analysis on variables that influence pandemic expansion	Transforming YAWL Workflows with Time Interval Constraints into Timed Automata	Evaluation of the use of Wi-Fi Probes to Produce A Human Detection System
13.20-13.40	The Efficiency of Time Series Clustering Method Based on Distribution of Difference Using Several Distances	Enabling Semantic Interoperability in Bhutan's E-Government: An Ontology-based Framework	Scalable Distributed Broker System for Very Large MQTT Networks
13.40-14.00	MS-SRALAT: Multi-granularity SubStructure-Aware Representation Learning Algorithm for Time-series	A component recommendation model for issues in software projects	An Approximation Algorithm for the Vertex Multicut on Trees with an Application to the Tracking Paths Problem
14.00-14.20	Using Latent Dirichlet Allocation to investigate guest experience in Airbnb accommodation during COVID-19 pandemic in the United Kingdom	CareerVio: A Platform for Personalized Collaborative and Gamified Software Engineering MOOCs	Memory-Efficient Adjoints via Graph Partitioning
14.20-14.40		A Microservices Quality Model Based on Microservices Anti-patterns	MAX-CUT on Samplings of Dense Graphs
14.40-15.00	Coffee break		
15.00-16.30	Sightseeing		