



The 26th International Computer Science and Engineering Conference 2022 (ICSEC2022)

• **Conference Program**

1st day - **December 21st, 2022**

<i>Time</i>	<i>Presentation</i>
1:00 PM – 4:30 PM	Registration (Onsite participants)
4:30 PM – 5:30 PM	Welcome Party (Onsite participants)

2nd day - **December 22nd, 2022**

<i>Time</i>	<i>Presentation</i>
8:00 AM – 8:30 AM	Registration (Onsite participants)
9:30 AM – 10:00 AM	Opening Ceremony, https://zoom.us/j/92978883576 (Online Participants)
10:00 AM – 10:30 AM	Keynote 1 – “Smart and Sustainable City” Prof. Wanida Kanarkard, <i>Khon Kaen University, Thailand</i>
10:30 AM – 11:00 AM	Keynote 2 – “Mobile Traffic Sensing Approaches for Smart City” Prof. Sooksan Panichpapiboon, <i>King Mongkut's Institute of Technology Ladkrabang, Thailand</i>
11:00 AM – 11:30 AM	Keynote 3 – “When Deep Learning Meets Computer Vision” Prof. Chih-Yang Lin, <i>Yuan-Ze University, Taiwan</i>
11:30 AM – 12:00 AM	Keynote 4 – “Sustainability Technology for The Future Education” Thanachart Vivattanaputi, <i>Lannacom Company Limited</i>
12:00 AM – 1:00 PM	Lunch (Onsite participants)
1:00 PM – 2:15 PM	Parallel Session 01
2:15 PM – 2:30 PM	Coffee Break (Onsite participants)
2:30 PM – 3:45 PM	Parallel Session 02
3:45 PM – 4:00 PM	Coffee Break (Onsite participants)
4:00 PM – 5:15 PM	Parallel Session 03
5:15 PM – 6:00 PM	Relaxing
6:00 PM – 9:00 PM	Banquet (Onsite participants)

3rd day - **December 23rd, 2022**

<i>Time</i>	<i>Presentation</i>
9:30 AM – 11:30 AM	Special Talk: “Future Research on Computer Science and Engineering” - Prof. Prabhas Chongstitvatana - Prof. Sartra Wongthanavasu - Prof. Chidchanok Lursinsap - Assoc.Prof. Punpiti Piamsa-nga - Assoc.Prof. Ekkarat Boonchieng

• **Parallel Sessions**

1. **Onsite Session – Room No. 9-202.** <https://zoom.us/j/92978883576>

Chair: **Asst.Prof.Surasak Tangsakul, Atchara Namburi and Taweewat Luangwiriya, Ph.D.**

#	TIME	PAPER ID	TITLE	PRESENTER
Parallel Session 01				
1	1.00 PM - 1.15 PM	1570854178	G-AUC: An Improved Metric for Classification Model Selection	Dr. SOBHAN SARKAR
2	1.15 PM - 1.30 PM	1570828406	Medical Image Segmentation Using LeViT-UNet++: A Case Study on GI Tract Data	Mr. Nemani Praneeth
3	1.30 PM - 1.45 PM	1570853071	Face recognition using Skin Color Segment and Modified Binary Particle Swarm Optimization	Mr. Titiwat Kuarkamphun
4	1.45 PM - 2.00 PM	1570854631	Python Code Smell Detection Using Machine Learning	Ms. Natthida Vatanapakorn
5	2.00 PM - 2.15 PM	1570854667	A Framework for Bang Saen Safe Food Avenue Management System	Ms. Wantana Sisomboon
Parallel Session 02				
6	2.30 PM - 2.45 PM	1570854719	Exploring the Use of Different Feature Levels of CNN for Anomaly Detection	Mr. Isack Farady
7	2.45 PM - 3.00 PM	1570854761	Isarn Dialect Word Segmentation using Bi-directional Gated Recurrent Unit with transfer learning approach	Mr. Sawetsit Aim-nang
8	3.00 PM - 3.15 PM	1570854793	Leaf Identification Using Learning Machines for Seedling Distribution in Thailand	Ms. Noranand Apichanapong
9	3.15 PM - 3.30 PM	1570855025	The Optimized Proportion for Beef Cattle Feed Using Sequential Least Squares Programming	Dr. Phuwitson Phumsaranakhom
10	3.30 PM - 3.45 PM	1570856267	Remote Moderated Usability Testing of a Web-Based Translation: A Case Study	Assoc. Prof. Lim Tek Yong
Parallel Session 03				
11	4.00 PM - 4.15 PM	1570864447	Analysis of Thai Fake News Using Naïve Bayes Models	Mr. Peemapat Podsoonthorn
12	4.15 PM - 4.30 PM	1570864524	Elderly Job Opportunity Analytic and Prediction System for Thai Aging Society	Mr. Taweewat Luangwiriya
13	4.30 PM - 4.45 PM	1570855036	Industrial IoT Edge Computing Platform for Real-Time Monitoring	Mr. Sorayut Glomglome
14	4.45 PM - 5.00 PM	1570854991	Multi-Range Ammonia Gas Sensor Control and Monitor via IoT System	Ms. Aphichaya Kruakuanphet
15	5.00 PM - 5.15 PM	1570838037	Smart Street Lighting Control for Electrical Power on Saving by IoT	Mr. Ratchet Thipards
16	5.15 PM - 5.30 PM	1570855321	Emotion Detection of Thai Elderly Facial Expressions Using Hybrid Object Detection	Mr. Thanapong khajontantichaikun
17	5.30 PM - 5.45 PM	1570834745	Selecting an Open-Source Home Automation System Using the AHP Methodology	Dr. Pipat Sookavatana

2. **Online Session #1 – Room No. 9-209.** <https://zoom.us/j/92978883576>
 Chair: **Asst.Prof.Rachada Kongkachandra, Ph.D. and Warunya Wunnasri, Ph.D.**

#	TIME	PAPER ID	TITLE	PRESENTER
Parallel Session 01				
1	1.00 PM - 1.15 PM	1570826935	Leveraging Feature Headers to Learn Sparse and Semantically Pertinent Linear Models	Dr. Sasin Janpuangtong
2	1.15 PM - 1.30 PM	1570833951	Robust Adaptive Backstepping Control Design for MIMO Electrically Driven Robot Manipulators Using RBF Neural Network with Disturbance	Dr. Muhammad Usman Jamil
3	1.30 PM - 1.45 PM	1570835877	Cancelable Face Biometric Verification Algorithm Built on GoogLeNet and Characteristic Arbitrary Projection	Mr. Hiba Basim Alwan
4	1.45 PM - 2.00 PM	1570854186	To Dev or to Doc?: Predicting College IT Students' Prominent Functions in Software Teams Using LMS Activities and Academic Profiles	Mr. Varit Rungbanapan
5	2.00 PM - 2.15 PM	1570854228	Thai Paraphrasing Tool for Chatbot Intent Recognition Training	Mr. Darlyn Sirikasem
Parallel Session 02				
6	2.30 PM - 2.45 PM	1570854791	Rugby Goal Kick Prediction Model Using OpenPose Coordinates and LSTM	Asst. Prof. Mondheera Pituxcoosuvann
7	2.45 PM - 3.00 PM	1570858064	A Comparison of the Instructor-Trainee Dance Dataset Using Cosine Similarity, Euclidean Distance, and Angular Difference	Mr. Thanawat Srikaewsiew
8	3.00 PM - 3.15 PM	1570860545	Thai Privacy Notice Analysis Based on Named-Entity Recognition Technique	Ms. Chanoksuda Wongvises
9	3.15 PM - 3.30 PM	1570860708	Bangla Text Emotion Classification Using LR, MNB and MLP with TF-IDF & CountVectorizer	Mr. Md Gulzar Hussain
10	3.30 PM - 3.45 PM	1570860762	Transforming Probabilistic Timed Automata to PRISM Model	Mr. Thirawat Satalungka
Parallel Session 03				
11	4.00 PM - 4.15 PM	1570861239	A Hybrid Book Recommendation System for University Library	Mr. Pitiwat Arunruviwat
12	4.15 PM - 4.30 PM	1570863301	Tag Recommendation for Movie and Music Contents	Dr. Jasmina Khaw Yen Min
13	4.30 PM - 4.45 PM	1570863748	Forecasting Air Quality Index in Thailand Using Ensemble Method	<i>Mr. Saksiri Lertnilkarn</i>
14	4.45 PM - 5.00 PM	1570854820	Contextual Data Modeling for Recommender System in Building and Construction Materials Business	Mr. Sutthirat Kliangklaio

3. **Online Session #2 – Room No. 9-210.** <https://zoom.us/j/92978883576>
 Chair: **Asst.Prof.Nitaya Muengnak, Ph.D.** and **Bowornrat Sriman, Ph.D.**

#	TIME	PAPER ID	TITLE	PRESENTER
Parallel Session 01				
1	1.00 PM - 1.15 PM	1570852987	Deep Learning for Sex Determination of the Clavicle: A Blind Study on a Thai Population	Ms. Kewalee Pichetpan
2	1.15 PM - 1.30 PM	1570853090	Information Systems in Medical Settings: A Covid-19 Detection System Using X-Ray Scans	Dr. AHMAD AL SMADI
3	1.30 PM - 1.45 PM	1570854866	Adaptive Learning Rate For Neural Network Classification Model	Mrs. Rujira Jullapak
4	1.45 PM - 2.00 PM	1570855955	Advanced Monitoring System for Streetlights with Theft Identification Features (AMoSSTIF) Using Raspberry Pi	Asst. Prof. Arjay Ramos Alba
5	2.00 PM - 2.15 PM	1570858978	Finding Picking Point Using Straight Line Detection of Label Attachment Machine	Mr. Lipheng Prum
Parallel Session 02				
6	2.30 PM - 2.45 PM	1570860560	Empirical Study of U-Net Based Models for 2D Face Recovery from Face-Mask Occlusions	Ms. LEONG YUAN LING
7	2.45 PM - 3.00 PM	1570862958	The Improvement Process for the Software Development and Requirements Management to Achieve Capability Level 3 of CMMI	Mr. Pitiphat Joembunthanaphong
8	3.00 PM - 3.15 PM	1570864361	AI-Based Suspicious Identification System for Agency Security Monitoring using Big Data Fusion	Dr. Surapol Vorapatratom
9	3.15 PM - 3.30 PM	1570864365	A Heuristic Enhancing Artificial Immune System for Three-Dimensional Loading Capacitated Vehicle Routing Problem	Dr. Peeraya Thapatsuwan
10	3.30 PM - 3.45 PM	1570864815	Mae Mai Muay Thai Layered Classification Using CNN and LSTM Models	Mr. Shujaat Ali Zaidi
Parallel Session 03				
11	4.00 PM - 4.15 PM	1570868862	Time Series Classification Using Deep Learning for HAR Based on Smart Wearable Sensors	Ms. Ponnipa Jantawong
12	4.15 PM - 4.30 PM	1570868863	Monitoring System of Wearable Sensor Signal in Rehabilitation Using Efficient Deep Learning Approaches	Ms. Ponnipa Jantawong
13	4.30 PM - 4.45 PM	1570857428	Face Detection Based Social Distancing Detection by Using Laplacian of Gaussian Method	Mrs. Casi Setianingsih

4. **Online Session #3 – Room No. 9-306.** <https://zoom.us/j/92978883576>
 Chair: **Asst.Prof.Jugnarin Kungjaroen, Ph.D.** and **Asst.Prof.Jitsaran Seekuka**

#	TIME	PAPER ID	TITLE	PRESENTER
Parallel Session 01				
1	1.00 PM - 1.15 PM	1570836678	A Tool for Automating IT Management in Small Schools	Ms. Jutamas Leanjay
2	1.15 PM - 1.30 PM	1570852909	Design an Optimal Fractional Order TID Controller for Congestion Avoidance in TCP/AQM System	Dr. Layla H. Abood
3	1.30 PM - 1.45 PM	1570853133	PIRSE: Plant Identification and Repository for the Smart Environment	Mr. Terapat Jinasa
4	1.45 PM - 2.00 PM	1570853362	An Implementation of DNS Operator and Network Guideline for Migrating Virtual Machine to KubeVirt	Mr. Supakorn Trakulmaiphol
Parallel Session 02				
5	2.30 PM - 2.45 PM	1570853713	Using Compression Tables to Improve HiveQL Performance with Spark A Case Study on NVMe Storage Devices	Dr. Kritwara Rattanaopas
6	2.45 PM - 3.00 PM	1570855031	Fingerprint Database Enhancement Using Spatial Interpolation for IoT-Based Indoor Localization	Mr. Farid Yuli Martin Adiyatma
7	3.00 PM - 3.15 PM	1570855057	Is Deep Diffusion Probabilistic Model Applicable for Fingerprint-Based Indoor Localization?	Mr. Dwi Joko Suroso
8	3.15 PM - 3.30 PM	1570858425	Securing Networks of IoT Devices with Digital Twins and Automated Adversary Emulation	Dr. Mohammed Elhajj
9	3.30 PM - 3.45 PM	1570858700	The Analysis of Research Literature on the Role of AI in Industrial Sector	Anshisa Denvuttivorakarn
Parallel Session 03				
10	4.00 PM - 4.15 PM	1570860801	Analysis of Matching Between Student and Curricula via TOPSIS Algorithm for Admission Decision Support	<i>Mr. Weera Yukunthorn</i>
11	4.15 PM - 4.30 PM	1570864042	Generic Laboratory Authoring Tool for Virtual and Remote Controlled Laboratories	Assoc. Prof. Ahmed M Abdelhaleem
12	4.30 PM - 4.45 PM	1570854668	Utilizing the Internet of Things Technology to Control Oyster Mushrooms	Mr. Pipop Maneejamnong

5. Online Session #4 – Room No. 9-307. <https://zoom.us/j/92978883576>

Chair: Chaiwat Sirawattananon, Ph.D., Asst.Prof.Susama Chokphoemphun and Asst.Prof.Thanawat Phattaraworamet

#	TIME	PAPER ID	TITLE	PRESENTER
Parallel Session 01				
1	1.00 PM - 1.15 PM	1570833929	Blood Vessels Detection by Regional-Based CNN for CT Scan of Lower Extremities	Mr. Littikrai Sakunpaisanwari
2	1.15 PM - 1.30 PM	1570833935	Heart Rate Estimation by PCA with LSTM from Video-Based Plethysmography Under Periodic Noise	Mr. Chetsadaporn Traivindisreesuk
3	1.30 PM - 1.45 PM	1570835821	Clustering of Human Gene Expression Stimulated by Bacterial Infection from Microarray Analysis	Ms. Phanarat Srichettha
4	1.45 PM - 2.00 PM	1570854131	Job-Candidate Classifying and Ranking System-Based Machine Learning Method	Ms. Thapanee Boonchob
5	2.00 PM - 2.15 PM	1570854317	ClinicYA: An Application for Pill Identification Using Deep Learning and K-Means Clustering	Asst. Prof. Ureerat Suksawatchon
Parallel Session 02				
6	2.30 PM - 2.45 PM	1570854600	MFCC Feature Selection for Infant Cry Classification	Ms. NATLADA MEEPHIW
7	2.45 PM - 3.00 PM	1570854736	Movie Recommendation System Using Director-Based	Mr. Maposee Hama
8	3.00 PM - 3.15 PM	1570855242	Thai Covid-19 Wave Breaks Analysis Based on Fourier Transform	Ms. Phatcharee Thepnimit
9	3.15 PM - 3.30 PM	1570863316	Multi-resolution Coarse-to-fine Registration Approach for Liver Computed Tomography Image Analysis	Mr. Xuan Loc Pham
10	3.30 PM - 3.45 PM	1570864297	Heterogeneous Data Analysis of Hypertrophic Cardiomyopathy to Prioritize Important Genes	Ms. Panisa Janyasupab
Parallel Session 03				
11	4.00 PM - 4.15 PM	1570864373	Network-Based Methods with Heterogeneous Data to Identify Severe COVID Immune-Related Genes'	Mr. Pakorn Sagulkoo
12	4.15 PM - 4.30 PM	1570860669	Comparative Analysis of Clustering Methodologies in DNA Storage	Ms. Subhasiny Sankar
13	4.30 PM - 4.45 PM	1570855177	Self-Regulated Learning Styles in Hybrid Learning Using Educational Data Mining Analysis	Asst. Prof. Praty Nuankaew