

2023 7th International Conference on Information Technology (InCIT 2023)

**Chiang Rai, Thailand
16-17 November 2023**



**IEEE Catalog Number: CFP23CAH-POD
ISBN: 979-8-3503-5870-4**

**Copyright © 2023 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP23CAH-POD
ISBN (Print-On-Demand):	979-8-3503-5870-4
ISBN (Online):	979-8-3503-5869-8

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

Table of Content

	Page
Welcome to InCIT2023	ii
Welcome Message from the General Chair of InCIT2023	iii
Welcome Message from the Technical Program Chair of InCIT2023	iv
Committees	v
Keynote Speakers	vi
Conference Program	xi
Special Sessions in InCIT2023	xiii
Venue of InCIT2023	xx
InCIT-SS4: Erasmus+ Joint Session on Automation and Industry 4.0	
1570959233	1
Cyber Physical System of Robotics Training Set in RMUTTO ETAT Smart LAB <i>Pongpat Singsri; Karin Kosiyannurak; Woramet Thongtan; Chawalit Panya-isara; Tassaphan Suwannatat; Srichol Phiromlap</i>	
1570959631	6
Automation 4.0 for Water Level Monitoring System <i>Warangkhan Kimpan; Attapon Palananda; Boonhatai Kruekaew</i>	
1570959746	11
Comparison of Object Detection Technique for Applications in ETAT Automation Training Set <i>Karin Kosiyannurak; Pongpat Singsri; Soontaree Seangsri; Sommart Prompt</i>	
1570959899	17
Performance Evaluation of OPC UA and MQTT for ETAT Smart Lab (ESL) <i>Narongsak Putpuek; Apiradee Putpuek; Sansern Phawandee</i>	
1570960126	22
Development of Control Programming and Data Analytics on the Controlled Automatic Sorting Simulation System <i>Supaporn Bundasak; Iya Chomchan</i>	
1570954622	27
Fundus Image Registration Based on Extremal Regions of Extremum Levels <i>Watcharaphong Yookwan; Kamal Baha; Athita Onuean; Supawadee Srikamdee; Krisana Chinnasarn</i>	

Table of Content (Cont.)

InCIT-RS1: Augmented Reality and Virtual Reality	Page
1570959797 Digital Twin in Automation Industry: Optimal Communication Protocol <i>Chalermpan Fongsamut; Tanat Kanangnanon; Benchaporn Jantarakongkul; Prajaks Jitngernmadan</i>	33
1570959894 Optimal AI Model for Industrial AR Application Based on Object Detection <i>Kanuengnij Kubola; Bhusana Kongon; Prawit Boonmee; Prajaks Jitngernmadan</i>	38
1570958515 Evaluating Usability and Immersion Experiences in Virtual Reality Platforms: A Case Study Focused on the Ancient City of Chiang Saen <i>Kananeek Sattabongkot; Ratchanon Nobnop; Banphot Nobaew; Yoothapong Tongpaeng</i>	43
1570959082 Designing and Implementing Virtual Reality Technology for Momentary Stress Relieving <i>Pakakrong Panthanan; Banphot Nobaew</i>	48
1570954774 Vehicle Collision Prediction From Visual Sizes of Objects via Car Dash Camera <i>Siwakorn Sairung; Pongporn Yasotarin; Sasipa Panthuwadeethorn; Suphakant Phimoltares</i>	54
1570950549 Analyzing Emotional Values' Impact on Purchase Intention in Mobile Game Virtual Item Stores <i>Stephani Inggrit Swastini Dewi</i>	60

Table of Content (Cont.)

InCIT-RS2:	Artificial Intelligence, Natural Language Processing	Page
1570960130	A Method of Identifying Treatment Modalities Related to COVID-19 From PubMed Abstracts <i>Pornpavit Donsena; Jantima Polpinij; Manasawee Kaenampornpan; Bancha Luaphol</i>	65
1570961651	Machine Learning-Based Multiclass Classification Methods for Sentiment Analysis <i>Kiatnumchai Innork; Jantima Polpinij; Rungtip Charoensak; Manasawee Kaenampornpan; Bancha Luaphol; Khanista Namee; Umaporn Saisangchan; Theeraya Uttha; Areej Meny</i>	70
1570954614	DeepThaiMush: A Deep Learning Approach to Classify Poisonous and Edible Mushrooms Using YOLOv8 <i>Worawit Werapan; Ureerat Suksawatchon; Supawadee Srikamdee; Jakkarin Suksawatchon</i>	75
1570951489	Statistical Comparison ARIMA Order Performance in Stock Market <i>Chanatip Deemee; Kirati Ngampis; Thanapon Noraset; Tipajin Thaipisutikul; Min-Te Sun; Kotcharat Kitchat</i>	81
1570946321	Explainable AI Supported Evaluation and Comparison on Credit Card Fraud Detection Models <i>Chanisara Kotrachai; Praewsuphang Chanruangrat; Tipajin Thaipisutikul; Worapan Kusakunniran; Wen-Chin Hsu; Sun Yi-Chun</i>	86

Table of Content (Cont.)

InCIT-RS3: E-Education, E-Commerce, E-Healthcare		Page
1570958793	Teaching in Online Spaces: Issues and Challenges <i>Yuwanuch Gulatee; Babara Combes</i>	92
1570950085	Effects of Quality Factor and Satisfaction on the Acceptance of Online Learning (Adoption Learning Technology) <i>FX Hendra Prasetya; Albertus Dwiyoga Widiantoro; Bernardinus Harnadi</i>	98
1570949688	RESTful Web Services-Based Whistleblowing Systems Development for Higher Education <i>Ridwan Sanjaya; Theresia Dwi Hastuti; Benedictus Danang Setianto; Natasha Diva Muljono</i>	104
1570937950	Leveraging DISC Personality Principle and Gamification for Enhancing Collaborative Skills in Education: A Conjecture Mapping Approach <i>Buchaputara Pansri; Vivat Thongchotchat; Kazuhiko Sato</i>	109
1570954288	Technostress Effects on Indonesian e-Wallet Users: A Case Study With LDA Modeling and Sentiment Analysis <i>Muhardi Saputra; Paulus Insap Santosa; Adhistya Erna Permanasari</i>	115

Table of Content (Cont.)

InCIT-RS4: AI Application, Communications and Networking	Page
1570959726 Ransomware Attack Analysis on Banking Systems <i>Iwaeni Tunji; Amorn Chomchoey; Naughtakid Phromchan; Krishna Chimmanee</i>	121
1570957674 Integrating Graph Neural Network and GPS Data for Hourly Travel Time Estimation in Bangkok Rama-4 Road Network <i>Manocha Kruetet; Chawit Sakulyuenyong; Prachya Rungtweesuk; Chaodit Aswakul</i>	126
1570958354 Poles Selecting for Transmission Line Arresters With Back Flashover Concerns Using Dynamic Programming <i>Teerapol Silawan</i>	131
1570954003 Analyzing the Federated Byzantine Agreement Blockchain Network for Liveness Using Multiple Online Analytical Processing (MOLAP) <i>Erdhi Widyarto Nugroho</i>	135
1570948012 Expert System for Initial Diagnosis of Covid-19 Using the Forward Chaining Method and Ripple Down Rules <i>Bernardus Osan Pratama; Agus Cahyo Nugroho; T. Brenda Chandrawati</i>	141
1570954945 Utilizing Artificial Intelligence in Cryptocurrency Trading: a Literature Review <i>Nuttapong Tungdajahirun; Krishna Chimmanee; Sumana Kasemsawasdi; Supanit Angsirikul; Parkpoom Chaisiriprasert; Papangkorn Pidchayathanakorn; Woratat Makasiranondh; Jiraporn Gatedee; Ratchasak Somyanonthanankul</i>	147

Table of Content (Cont.)

InCIT-SS6:	Advance Digital Technology and Innovation	Page
1570961816	A Hybrid Deep Neural Network With Attention Mechanism for Human Activity Recognition Based on Smartphone Sensors <i>Datchakorn Tancharoen; Anuchit Jitpattanakul; Sakorn Mekruksavanich</i>	153
1570954769	An Interactive AR System of Representing Visual Differences Caused by Color Vision Defect <i>Shogo Izumi; Mitsunori Makino</i>	158
1570939005	Prediction of Number of Accesses by Thumbnail Image Classification on Video Sites <i>Yukinobu Miyamoto</i>	163
1570951330	Analyzing User Comments on Fintech E-Wallet Applications in Indonesia Using the LDA Algorithm <i>Albertus Dwiyoga Widianoro; Ridwan Sanjaya; Mustafid Mustafid</i>	169
1570952206	Evaluating the Performance and Accuracy of Supervised Learning Models on Sentiment Analysis of E-Wallet <i>Bernardinus Harnadi; Albertus Dwiyoga Widianoro</i>	175
1570955242	Human Action Classification Based on Pose Estimation and Artificial Neural Network <i>Trairat Sabaichai; Datchakorn Tancharoen; Pawit Limpasuthum</i>	181

Table of Content (Cont.)

InCIT-RS5: Web and Internet Technologies		Page
1570950510	V Guide: A Travel Planner Web Application for the Thai Tourism Community <i>Songsri Tangsripairoj; Jaranut Lertsirivorakul; Chatchai Hojitsiriyanon; Pakin Chunthong</i>	186
1570955153	Stock Plenty: A Web Application for Virtual Stock Trading <i>Songsri Tangsripairoj; Viplob Lertkulthum; Luxi Xie; Yuanqin Yang</i>	192
1570948614	Applications of the Rua-Rai-Sai for Disaster Monitoring and Warning in Thailand <i>Kumpee Teeravech; Anusorn Yungkumpart; Kanitta Yarak; Wira Srimala; Taweesak Samma; Patikom Thongjing</i>	198
1570954130	The Logo Detection in an Illegitimate Web Page <i>Suppakarn Chansareewittaya; Mahamah Sebakor; Kanokporn Pakhamwang; Narathip Sriherun; Noppason Waikawee; Promchat Jaijith</i>	204
1570954113	The Development of WLAN Time Face Recorder System <i>Suppakarn Chansareewittaya; Mahamah Sebakor; Sirilux Keawoud; Raphephon Riyapraw; Siriyakorn Yuyen</i>	209
1570958621	Development of Rubber Auction System: Pilot Case the Agency of the Rubber Authority of Thailand, Phitsanulok Province <i>Naphaschakorn Charoenthiphakorn; Piampeeti Wungsatanawat; Areeya Usappayasart; Kemachart Kemavuthanon; Paweena Suebsombut</i>	214

Table of Content (Cont.)

InCIT-RS6: Electrical Power Systems, Communications, Computation		Page
1570955358	Residential Energy Management System to Reduce Electricity Costs Considering the Lifespan of Energy Storage and Electric Vehicle Batteries <i>Adool Kruekaew; Phuwadon Khemchan; Phuwadon Khemchan; Artit Sirisawat; Anek Norasarn; Seree Khunchai</i>	220
1570952930	Adaptive Drift-Free Hill Climbing Maximum Power Point Tracking for PV Systems <i>Norazlan Hashim; Muhammad Khairul Azman Mohd Jamhari; Rahimi Baharom</i>	226
1570955248	Design, Development and Implementation of a Low-Cost Air Data Boom for Small Fixed-Wing UAVs <i>Nanthawat Saetun; Watcharapol Saengphet; Suradet Tantrairatn</i>	232
1570950273	A Binary Metamaterial for Planar Antennas <i>Tanatorn Tantipiriyakul; Komsan Kanjanasit; Terapass Jariyanorawiss</i>	237
1570946542	The R Statistical Package and Computation of Wald Confidence Intervals for the Scale Parameter of the Weighted Mixture Generalized Gamma Distribution <i>Wikanda Phaphan; Thanee Ananitthi; Lapasrada Singhasomboon</i>	242

Table of Content (Cont.)

InCIT-RS7: AI Applications		Page
1570947261	Chatbot-Powered Orchid Leaf Disease Classification and Management for Improved Farming <i>Keerati Santisarn; Taravichet Titijaronroj</i>	248
1570955265	Drug-Protein Target Identification by Network Analysis for the Activation of PKC/DAG Pathway in Diabetes <i>Nilubon Kurubanjerdjit</i>	254
1570955278	Comparison of SSD Models for Fertile Egg Image Classification <i>Krantawan Chewprecha; Ornprapun Songserm; Sethavidh Gertphol</i>	259
1570961791	Comparative Study of Deep Learning Model for Transient Image Classification <i>Pakpoom Prommool; Sirikan Chucherd</i>	265
1570953333	Usability Heuristics for Mobile Educational Games: A Case Study of the English Vocabularies Game <i>Thisana Kittiphitchayakun; Kamonchanok Pradubkhai; Thitikan Wanthanaku; Wacharawan Intayoad; Prasara Jakkaew; Nattapol Aunsri</i>	271

Table of Content (Cont.)

InCIT-RS8: Human Computer Interaction, IT and Project Management		Page
1570942275	Technology Issues Which Prevent Implementation of Enterprise Resource Planning Systems in LDCs' Organizations <i>Sane Yu; Khukrit Osathanunkul</i>	277
1570954767	Cross-Cultural Usability Evaluation of IoT Based Smart HVAC Dashboard <i>Rubina Shrestha; Nagul Cooharajanane</i>	281
1570933912	Experience Together: Using Game-Based Activities to Boost Perception of Sustainability <i>Wilawan Inchamnan; Napol Siripibal; Anuwat Ruttanasomboon; Waraporn Jirapanthong</i>	287
1570938678	Performance Evaluation of Programming Languages as API Services for Cloud Environments: A Comparative Study of PHP, Python, Node.js and Golang <i>Teerapong Tanadechopon; Boontariga Kasemsontitum</i>	293
1570939113	Reducing Patient Waiting Time at Phlebotomy Room of University Hospital Using Simulation Study <i>Wattanaichainkue; Narat Hasachoo</i>	298

Table of Content (Cont.)

InCIT-RS9: E-Education, Esociety	Page
1570935657 A Design of Blockchain-Based Happy Giving Application: Promoting Collaboration and Community Development <i>Nanta Janpitak; Natthapon Pannurat; Adisak Supeesun</i>	304
1570942914 Project Based Blended Learning Activities in Fundamental Digital Photography Class Enhancing Technical and Creativity Skills of Vocational Students <i>Vichayut Buntornwon; Kanyarat Sriwisathiyakun</i>	309
1570958796 Learning 2D Mobile Casual Musical Pitch Training Game Application (Pitchero) <i>Rangsiman Khamtue; Yootthapong Tongpaeng; Kemachart Kemavuthanon</i>	315
1570960219 An Analysis of Correlation Between Learning Style and Online Learning Performance During COVID-19: A Case Study of a Computer Programming Course <i>Patcharaporn Panwong; Wacharawan Intayoad</i>	319
1570952614 Exploring Diverse Educational Video Formats and Instructional Approaches for Effective Video-Based Learning <i>Nikorn Rongbuttsri; Chanapha Nambut; Nanthiphat Saengchong; Natawat Paneephuangphoo</i>	325

Table of Content (Cont.)

InCIT-RS10: Artificial Intelligence, Data Science and Analytics		Page
1570953938	Automating Academic Assessment: A Large Language Model Approach <i>Chatchai Wangwiwattana; Yuwaree Tongvivat</i>	330
1570951463	Urban Expansion Prediction Using Supervised Classification and ConvLSTM <i>Apiradee Putpuek; Apiradee Putpuek; Wittaya Taosa</i>	335
1570949138	Knowledge Graph Based System for Community Enterprises Product Enhancement <i>Nutjaya Chandoem; Sureena Matayong</i>	341
1570955050	Text Compression Algorithms Employed Vowels and Article Pattern <i>Prayat Lewan; Chouvalit Khancome</i>	346

Table of Content (Cont.)

InCIT-SS1:	Modern Techniques and Applications for IoT Devices, Communication Circuits and Systems	Page
1570949000	Development Automatic Weight Measurement System for Poultry Farms Using Internet of Things (IoT) Technology <i>Thosapol Manasri; Prakasit Prabpal; Chuthong Summatta; Somchat Sonasang; Krisda Sittida; Praty Phanomupatum</i>	352
1570949006	Power Divider Performance Using Microstrip Coupled Lines Using Inductor Compensation <i>Phatcharanat Saeng-on; Praty Phanomupatum; Somchat Sonasang; Meechai Jamsai; Ravee Phromlounsri</i>	358
1570957372	Microstrip Coupled-Lines Crosstalk Reducing Using Centered Step Impedance Transmission Lines <i>Ravee Phromlounsri; Somchat Sonasang; Somkuan Srisawat; Nirundon Panit; Thanapat Cheawchanwattana; Mitchai Chongcheawchamnan</i>	364
1570961260	Development of a Community Ambient Air Quality Monitoring System Using a Wireless Sensor Network on IoT-Platform <i>Sahapong Somwong; Tanakorn Intasuth; Kritsada Puangsuwan</i>	369
1570961325	Feasibility Study of Plating FDM Material for Printing Circuits <i>Saran Tantiwit; Pongsakorn Promin; Mitchai Chongcheawchamnan</i>	374
1570954085	The Community Satisfaction Survey of the Bus Transit System Using Internet of Things Technology <i>Thana Udomsripaiboon; Thanakrit Thawatthanadet; Suphachai Jantaut; Jirabhorn Chaiwongsai; Pornthep Rojanavasut; Thitirath Chaewsuwan</i>	379

Table of Content (Cont.)

InCIT-SS8: CCC: Future Horizons: Bridging ICT, AI, and Multidisciplinary Innovations		Page
1570960902	Optimization Sliding Mode Controller Using Reinforcement Learning <i>Somporn Tiacharoen</i>	384
1570960912	Optimal Tuning of 2DOF-PID Controllers Using Bat Algorithm <i>Somporn Tiacharoen</i>	388
1570965789	Towards 6G: Beam Prediction Using Convolutional Neural Network and Artificial Neural Network <i>Charith Dissanayake; Punnarumol Temdee</i>	392
1570970451	A Study of Generative Large Language Model for Healthcare <i>Seong-Gyeol Park; Ahtae Kim; Taewoong Yoon; Chayapol Kamyod; Cheong Kim</i>	397
1570970836	Massive Face-Recognition via CNN Base on Big-Data Framework for Surveillance <i>Bohan Yang; Worasak Rueangsirarak; Roungsan Chaisricharoen</i>	401
1570933589	An Agent-Based Detection Method of Condition Progression Trends on Mobile for Hypertensive Diabetic Patients <i>Sutussa Sanon; Punnarumol Temdee</i>	407

Table of Content (Cont.)

InCIT-RS11: Data Science and Analytics, IT Security		Page
1570959564	Detecting Student Emotions During Online Learning Using Artificial Intelligence Systems <i>Phurichaya Choksettakit; Saromporn Charoenpit; Kanda Tiwatthanont; Pramuk Boonsieng</i>	412
1570950112	Uncovering Hidden Tourist Traits Using Characteristics-Based Clustering <i>Thanyathon Kingrat; Phusanisa Suksophonthana; Wasawat Srihawong; Nattapat Chantrachirathumrong; Phuchit Yuttagla; Pattaramon Vuttipittayamongkol</i>	418
1570949209	Foot Traffic Analysis Using Wi-Fi Sensor During the Tokyo 2020 Olympics and Paralympics <i>Peerada Traganmaturapot; Noboru Sonehara; Nobuharu Hiruma; Nagul Cooharojananone; Jirakit Jirapongwanich; Kanat Yodsakuntip; Kanokwan Atchariyachanvanich</i>	424
1570955483	The Study of Roadsides WiFi Performance and Analysis via Signal Strength Assessment: A Case Study in Bangkok Metropolitan Street <i>Nilamit Nilas; Pakamas Choosit</i>	430
1570945316	Decrypting Criminal Transaction Patterns in Cryptocurrency <i>Sawanya Rattanabunno; Warodom Werapun</i>	435
1570955113	Effects of Malware Detection Parameters on Classical Vs Deep ML Techniques <i>Tadiwa Vhito; Jakapan Suaboot; Warodom Werapun; Thitinan Kliangsuwan</i>	440

Table of Content (Cont.)

InCIT-SS5:	Transforming Innovative Ideas to Intelligent System	Page
1570949050	Applying Modified Convolutional Neural Networks for Detecting Intrusion <i>Kanin Siritharagul; Sunantha Sodsee</i>	446
1570955315	Factors Affecting Air Pollution Particulate Matter in Bangkok <i>Jakkaphan Whasphuttisit; Watchareewan Jitsakul</i>	452
1570955438	Ensemble Learning Approach for Predicting Outstanding Debts for Housing Loans <i>Kamonchanok Rungjaroen; Jakkaphan Whasphuttisit; Watchareewan Jitsakul</i>	458
1570955442	Fruit Classification With Deep Transfer Learning Using Image Processing <i>Santi Sukkasem; Watchareewan Jitsakul; Phayung Meesad</i>	464
1570955452	Face Recognition Using Deep Learning <i>Nattapong Jantarasorn; Jakkaphan Whasphuttisit; Watchareewan Jitsakul</i>	470
1570956435	Sentiment Analysis Product Using Text Mining With Word Relationship Represented by Graph <i>Watchareewan Jitsakul</i>	475

Table of Content (Cont.)

InCIT-RS12: AI for Education and Industries		Page
1570958946	A Review of Chatbots Development and Utilization for Admission in Mae Fah Luang University <i>Subandit Pansombut; Khwunta Kirimasthong</i>	481
1570955459	Smart and Safety Factory: A Case Study of Forklift Safety Detection System in Chaingrai Cooperative Milling Factory <i>Malinee Anan; Samatthachai Yamsa-ard; Damrongpol Kamhangwong; Pradorn Sureephong; Santichai Wicha</i>	487
1570959063	Prototype Structure Design Process Using Information Flow Diagram (IFD) for Mobile Application Learning System <i>Titiya Chomngern; Worapas Tawunwoot</i>	492
1570956074	Decision Model of Walk-Over-Weighing System (WoW) for Support the Fattening Process of Beef Cattle Farm <i>Santichai Wicha; Khumkanok Noinan; Samatthachai Yamsa-ard; Damrongpol Kamhangwong; Roungsan Chaisricharoen; Pradorn Sureephong</i>	498
1570950311	The Design and Implement of Digital Literacy Tracking System for Undergraduate Students <i>Supawee Makdee; Waransanang Boontarig; Lumpoon Puttasomsri</i>	503

Table of Content (Cont.)

InCIT-RS13: Machine Learning, Datadriven Application		Page
1570955477	Investigating the Generative-AI Evaluation Methods and Correlation With Fashion Designers <i>Hsi Yeh Wang; Surapong Utama</i>	508
1570955625	Unveiling Patterns in the Night Market: A Machine Learning Approach to Customer Segmentation and Market Basket Analysis <i>Thandar Phyo; Surapong Utama</i>	514
1570955422	Improving Classification Performance of Money Laundering Transactions Using Typological Features <i>The Hnin Phyu; Surapong Utama</i>	520
1570955530	Classification of Unsafe Children's Toys Based on NLP-Generated Corpus <i>Htoo Thiri Wai; Surapong Utama</i>	526
1570955291	Understanding Employees' Patterns via Workload Clustering From Electronic Portfolio <i>Piyawat Paramee; Worasak Rueangsirarak; Surapong Utama</i>	532

Table of Content (Cont.)

InCIT-SS2: Digital Transformation Technology		Page
1570955513	Depression Classification From Thai Text Twitter Post Based on NLP-Generated Corpus <i>Vorraya Suttiprapa; Surapong Utama</i>	538
1570958628	Clustering Thailand's Provinces Based on Socio-Economic Data <i>Pornpinun Yeerong; Surapong Utama</i>	544
1570954082	Intelligent Genetic Crossover Algorithm for Improving State Estimation in Particle Filtering <i>Chanin Kuptamete; Nattapol Aunsri</i>	550
1570953147	Improving Reliability of State Estimation by Particle Filter With Cauchy Likelihood Function <i>May Htet Htet Khine; Chanin Kuptamete; Nattapol Aunsri</i>	556
1570960320	HALGAP: The Platform Assists Farmers in Pursuing GAP and HALAL Standards <i>Tama Duangnamol; Pradorn Sureephong; Suepphong Chernbumroong; Komalaporn Kummalue; Ruttikan Khammongkhon; Sulaiya Piemchaiwat</i>	562
Author Index		567