



IEEE CCWC 2022

The 2022 IEEE 12th Annual Computing and Communication Workshop and Conference

**Virtual Conference, Las Vegas, USA
26 - 29 January, 2022**

All the timings are given in Pacific Standard Time (PST (UTC-08))

TECHNICAL SCHEDULE

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DAY 1: 26th January 2022

| TIME | NAME OF THE EVENT | PARTICIPATION LINK |
|--------------------|--|---|
| 8.30 AM - 9.00 AM | INAUGURATION | https://zoom.us/j/6319961197 |
| 9.00 AM – 9:45 AM | KEYNOTE ADDRESS BY JEFFREY D. ULLMAN (PROFESSOR, STANFORD UNIVERSITY) TITLE OF TALK: COMPUTATIONAL COMPLEXITY THEORY FOR MAPREDUCE | |
| 9:45 AM - 10.30 AM | KEYNOTE ADDRESS BY STEPHEN BOYD (PROFESSOR, STANFORD UNIVERSITY) TITLE OF TALK: CONVEX OPTIMIZATION | |

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| 10.30 AM – 10.45 AM | BREAK |
|---------------------|-------|

All the timings are given in Pacific Standard Time (PST (UTC-8))

DAY 1: 26th January 2022

| TIME | PARALLEL SESSION | PARTICIPATION LINK |
|---------------------|--|---|
| 10.45 AM – 12.15 PM | ALGORITHMS AND THEORY | https://zoom.us/j/4109219194 |
| 10.45 AM – 12.15 PM | ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING | https://zoom.us/j/6626883577 |
| 10.45 AM – 12.15 PM | ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING | https://zoom.us/j/9587888372 |
| 10.45 AM – 12.15 PM | ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING | https://zoom.us/j/4897406939 |
| 12:15 PM – 12:30 PM | -----BREAK----- | --NA-- |
| 12:30 PM – 2:00 PM | ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING | https://zoom.us/j/4109219194 |
| 12:30 PM – 2:00 PM | ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING | https://zoom.us/j/6626883577 |
| 12:30 PM – 2:00 PM | BIG DATA AND ANALYTICS | https://zoom.us/j/9587888372 |
| 12:30 PM – 2:00 PM | BIG DATA AND ANALYTICS | https://zoom.us/j/4897406939 |

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PARALLEL SESSIONS

SESSION 1: ALGORITHMS AND THEORY

SESSION CHAIR: XIAOYU SONG (PORTLAND STATE UNIVERSITY)

SESSION TIME: 10.45 AM – 12.15 PM (DAY 1: 26th January 2022)

PARTICIPATION LINK: <https://zoom.us/j/4109219194>

| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
|---------------------|------------|---|---|
| 10:45 AM – 11:00 AM | 1570784506 | Robust Supervisory Control for Cyber-Physical Systems Based on Discrete Timed Petri Nets | Fu-Shiung Hsieh (Chaoyang University of Technology, Taiwan) |
| 11:00 AM – 11:15 AM | 1570783716 | Email Phishing Detection Based on Naïve Bayes, Random Forests, and SVM Classifications: A Comparative Study | Mustafa Ahmad Al-Fayoumi, Ammar J Odeh and Rana Abdulraheem (Princess Sumaya University for Technology, Jordan); Ismail Keshta (AlMaarefa University, Saudi Arabia); Abobakr Aboshgifa (The Libyan Higher Technical Center for Training and Production, Libya); Tareq AlHajahjeh (Greater Amman Municipality, Jordan) |
| 11:15 AM – 11:30 AM | 1570778722 | Space Selection and Abstraction in Set Theoretic Estimation | Albert H Carlson (Austin Community College, USA); Shivanjali Khare (University of New Haven, USA); Indira K Dutta and Bhaskar Ghosh (Arkansas Tech University, USA); Michael W Totaro (University of Louisiana at Lafayette & Ray P. Authement College of Sciences, USA) |
| 11:30 AM – 11:45 AM | 1570782867 | Coherence of Hand Muscles During Activities of Daily Living | Brendan P. Beauchamp, Nabeeh Kandalaft and Samhita Rhodes (Grand Valley State University, USA) |
| 11:45 AM - 12:00 PM | 1570783574 | Determination of 3D Coordinates of Objects From Image With Deep Learning Model | Md Rasel Hossain, Md Mahbubur Rahman, Mohammad Rezaul Karim Sujon, Md. Jaki Al Amin and Chinmay Bepery (Patuakhali Science and Technology University, Bangladesh) |
| 12:00 PM -12:15 PM | 1570782782 | Development For an IoT BasedHealth Monitoring System fore-Health | Mohammad Monirujjaman Khan (North South University & Queen Mary University of London, Bangladesh) |

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| SESSION 2:ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING | | | |
|---|------------|--|---|
| SESSION CHAIR: MD L ALI (RIDER UNIVERSITY, USA) | | | |
| SESSION TIME: 10.45 AM – 12.15 PM (DAY 1: 26 th January 2022) | | | |
| PARTICIPATION LINK: https://zoom.us/j/6626883577 | | | |
| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
| 10:45 AM – 11:00 AM | 1570784386 | Electricity Consumption Prediction Model for Southern Luzon State University-Main Campus Using Artificial Neural Network | Aubee T. Mahusay (Mapua University, Philippines & Southern Luzon State University, Philippines); Senen Fenomeno (Mapua University, Philippines) |
| 11:00 AM – 11:15 AM | 1570783373 | Automated Feature Reduction in Machine Learning | David Shilane (Columbia University, USA) |
| 11:15 AM – 11:30 AM | 1570783344 | Predicting the Outcome of Soccer Matches Using Machine Learning and Statistical Analysis | Haytham Elmiligi (Thompson Rivers University, Canada); Sherif Saad (401 Sunset Ave, Canada & University Of Windsor, Canada) |
| 11:30 AM – 11:45 AM | 1570782533 | Classification of Stroke Victims Through Supervised Machine Learning Algorithms and Ensemble Learning | Dalton Hensley and Heba Elgazzar (Morehead State University, USA) |
| 11:45 AM - 12:00 PM | 1570783705 | Privacy and Security in Mobile Health Technologies: Challenges and Concerns | Ammar J Odeh (Princess Sumaya University for Technology, Jordan); Ismail Keshta (AlMaarefa University, Saudi Arabia); Eman Abdelfattah (Ramapo College of New Jersey, USA); Abobakr Aboshgifa (The Libyan Higher Technical Center for Training and Production, Libya) |
| 12:00 PM -12:15 PM | 1570782861 | Smart Recon: Network Traffic Fingerprinting for IoT Device Identification | Jay Thom, Nathan Thom and Shamik Sengupta (University of Nevada, Reno, USA); Emily Hand (UNR, USA) |

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SESSION 3: ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING**SESSION CHAIR: ADAM W. SKOREK (UNIVERSITÉ DU QUÉBEC , CANADA)****SESSION TIME: 10.45 AM – 12.15 PM (DAY 1: 26th January 2022)****PARTICIPATION LINK: <https://zoom.us/j/9587888372>**

| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
|----------------------|-----------------|---|---|
| 10:45 AM – 11:00 AM | 1570784576 | Review of Deep Learning Methods for Automated Sleep Staging | Maryam Heidari (George Mason University, USA); Masoud Malekzade and Parisa Hajibabae (University of Massachusetts at Lowell, USA) |
| 11:00 AM – 11:15 AM | 1570784389 | Analysis of Reinforcement Learning in Autonomous Vehicles | Tauheed Khan Mohd, Estephanos Jebessa, Kidus Olana, Kidus Getachew and Stuart Isteeffanos (Augustana College, USA) |
| 11:15 AM – 11:30 AM | 1570784579 | Cyberbullying Detection in Social Media Using Machine Learning Algorithms | Maryam Heidari (George Mason University, USA); Parisa Hajibabae and Masoud Malekzade (University of Massachusetts at Lowell, USA) |
| 11:30 AM – 11:45 AM | 1570784544 | Feed-Forward Intrusion Detection and Classification on A Smart Grid Network | Adedayo Aribisala, Mohammad S Khan and Ghaith Husari (East Tennessee State University, USA) |
| 11:45 AM - 12:00 PM | 1570784292 | Real-Time Motion Tracking System and Data Analytics for Live Insects Using Three-Wheeled Servosphere System | Nicholas E. Lee (& Hopkins School, USA); Dal Hyung Kim (Kennesaw State University, USA) |
| 12:00 PM -12:15 PM | 1570784584 | MapReduce Preprocess of Big Graphs for Rapid Connected Components Detection | Maryam Heidari (George Mason University, USA); Reyhaneh Abdolazimi (Syracuse University, USA) |

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| SESSION 4: ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING | | | |
|---|------------|--|--|
| SESSION CHAIR : NAIMA A KAABOUC (UNIVERSITY OF NORTH DAKOTA, USA) | | | |
| SESSION TIME: 10.45 AM – 12.15 PM (DAY 1: 26 th January 2022) | | | |
| PARTICIPATION LINK: https://zoom.us/j/4897406939 | | | |
| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
| 10:45 AM – 11:00 AM | 1570783386 | Challenges Faced by Industries and Their Potential Solutions in Deploying Machine Learning Applications | Raj Shukla and John Cartlidge (University of Bristol, United Kingdom (Great Britain)) |
| 11:00 AM – 11:15 AM | 1570783303 | Fine-Grained Chinese Named Entity Recognition Based on MacBERT-Attn-BiLSTM-CRF Model | Jueyang Wang, Shuzhen Li, Edward Agyemang-Duah, Xingyu Feng, Chun Xu, Yuao Ji and Junqiang Liu (Zhejiang Gongshang University, China) |
| 11:15 AM – 11:30 AM | 1570783807 | Analysis of the Use of Analytics Platform for the Commercial Value of Mud Crab Production Using Non-Parametric Model | Rossian V Perea and Enrique Festijo (Technological Institute of the Philippines, Philippines) |
| 11:30 AM – 11:45 AM | 1570780527 | Scalable Hindsight Experience Replay Based Q-Learning Framework With Explainability for Big Data Applications in Fog Computing | Bhargavi Krishnamurthy (Postdoc & University of Memphis, USA); Sajjan Shiva (University of Memphis, USA) |
| 11:45 AM - 12:00 PM | 1570779163 | Interrelating N-Gram Based Protein Sequences Using LSTMs With Parallel Capsule Routing | Sashank Sridhar and Sowmya Sanagavarapu (Anna University, India) |
| 12:00 PM -12:15 PM | 1570783330 | Early Rumor Detection Based on Data Augmentation and Pre-Training Transformer | Yanjun Hu, Xinyi Ju, Zhousheng Ye, Sulaiman Khan and Chengwu Yuan (Zhejiang Gongshang University, China); Qiran Lai (School of Information and Electronic Engineering, China); Junqiang Liu (Zhejiang Gongshang University, China) |

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|---------------------|--------------|
| 12:15 PM – 12:30 PM | BREAK |
|---------------------|--------------|

All the timings are given in Pacific Standard Time (PST (UTC-8))

PARALLEL SESSIONS

SESSION 5: ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

SESSION CHAIR : MD L ALI (RIDER UNIVERSITY, USA)

SESSION TIME: 12:30 PM – 2:00 PM (DAY 1: 26th January 2022)

PARTICIPATION LINK: <https://zoom.us/j/4109219194>

| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
|---------------------|------------|---|--|
| 12:30 PM – 12:45 PM | 1570783495 | Betti-Number Based Machine Learning Classifier Frame-Work for Predicting the Hepatic Decompensation in Patients With Primary Sclerosing Cholangitis | Yashbir Singh (Mayo Clinic, Rochester, USA) |
| 12:45 PM – 1:00 PM | 1570783987 | Handwritten Digit Recognition Using Convolution Neural Networks | Shailesh S Rajput and Yoonsuk Choi (California State University, Fullerton, USA) |
| 1:00 PM -1:15 PM | 1570780139 | A Comparative Study of Machine Learning Algorithms for Identifying Mental States From EEG Recordings | Chuck Easttom (Georgetown University, USA); Izzat Alsmadi (Texas A&M San Antonio, USA) |
| 1:15 PM – 1:30 PM | 1570780750 | Skin Cancer Detection Using Convolutional Neural Network | Mohammad Monirujjaman Khan (North South University & Queen Mary University of London, Bangladesh) |
| 1:30 PM – 1:45 PM | 1570781117 | Optimize Path Planning for UAV COVID-19 Test Kits Delivery System by Hybrid Reinforcement Learning | Yuan Xing, Charles Carlson and Holly Yuan (University of Wisconsin-Stout, USA) |
| 1:45 PM - 2:00 PM | 1570781542 | A Study on Application Category Estimation Method Based on Burst Characteristics of Communication | Hiroshi Aoki and Takashi Ozu (Advanced Telecommunications Research Institute International, Japan); Akio Hasegawa (ATR Adaptive Communications Research Lab., Japan); Hiroyuki Yokoyama (ATR, Japan) |

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| SESSION 6: ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING | | | |
|---|------------|---|--|
| SESSION CHAIR : ADAM W. SKOREK (UNIVERSITÉ DU QUÉBEC , CANADA) | | | |
| SESSION TIME: 12:30 PM – 2:00 PM (DAY 1: 26 th January 2022) | | | |
| PARTICIPATION LINK: https://zoom.us/j/6626883577 | | | |
| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
| 12:30 PM – 12:45 PM | 1570781631 | Design of a Machine Learning Based Intrusion Detection Framework and Methodology for IoT Networks | Ricardo Alejandro Manzano S. (Cistech Limited, Canada); Nishith Goel (Cistech Ltd., Canada); Marzia Zaman (Cistel Technology Inc., Canada); Rohit Joshi (Cistel Technology, Canada); Kshirasagar Naik (University of Waterloo, Canada) |
| 12:45 PM – 1:00 PM | 1570781638 | Analysis of Transfer Learning Models for Face Mask Detection | Duygu Cakir and Ozge Yucel Kasap (Bahcesehir University, Turkey) |
| 1:00 PM -1:15 PM | 1570782245 | Predictive Analysis and Brief Study of Early-Stage Diabetes Using Multiple Classifier Models | Mohammad Sadman Tahsin (Brac University, Bangladesh); Md Jobayer (BRAC University, Bangladesh); Md. Borhan Uddin Antor, Maidul Islam, Fatima Fairuz Raisa and Md. Al Hasan Shaikat (Brac University, Bangladesh) |
| 1:15 PM – 1:30 PM | 1570782853 | Instance-Based Supervised Machine Learning Models for Detecting GPS Spoofing Attacks on UAS | Ghilas Aissou, Selma Benouadah, Hassan El Alami and Naima A Kaabouch (University of North Dakota, USA) |
| 1:30 PM – 1:45 PM | 1570782857 | A Survey on Mobile Malware Detection Methods Using Machine Learning | Mina Esmail Zadeh Nojoo Kambar and Armin Esmaeilzadeh (University of Nevada Las Vegas, USA); Yoohwan Kim (University of Nevada, Las Vegas, USA); Kazem Taghva (University of Nevada Las Vegas, USA) |
| 1:45 PM - 2:00 PM | 1570784593 | Bimodal Data Mining: Integration of Key Data and Semantic Analysis for Text/Audio Datasets | Maryam Heidari, Austin Crow, Victor Corja and Nannan Liu (George Mason University, USA) |

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| SESSION 7: BIG DATA AND ANALYTICS | | | |
|---|------------|--|---|
| SESSION CHAIR : HEBA ELGAZZAR (MOREHEAD STATE UNIVERSITY, USA) | | | |
| SESSION TIME: 12:30 PM – 2:00 PM (DAY 1: 26 th January 2022) | | | |
| PARTICIPATION LINK: https://zoom.us/j/9587888372 | | | |
| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
| 12:30 PM – 12:45 PM | 1570784568 | Forecasting Water Inflow for Bang Lang Dam | Akmal Benhawan, Sureena Matayong and Chidchanok Choksuchat (Prince of Songkla University, Thailand) |
| 12:45 PM – 1:00 PM | 1570784137 | The Effect of Singular-Vectors Feature Selection (SVFS) Based Hyper Dimensionality Framework in Ligand-Based Virtual Screening | Aya Mostafa (Egypt); Sameh Salem and Amr E. Mohamed (Helwan University, Egypt) |
| 1:00 PM -1:15 PM | 1570784581 | Predicting Bicycle Package Delivery Demand Using Historical Spatiotemporal Data | Sudarshan S Chawathe (University of Maine, USA) |
| 1:15 PM – 1:30 PM | 1570778051 | High Availability Distributed Monitoring in Data Center Infrastructures | Elisa Benetti (LepidaScpA, Italy); Matteo Fracassetti (Lepida ScpA, Italy); Gianluca Mazzini (LepidaSpA & UniFe, Italy) |
| 1:30 PM – 1:45 PM | 1570783115 | Solutions for Closing Usage Gap in Rural Areas in West Africa | Ida Tognisse (IMSP Bénin, Benin); Jules Dégila (University of Abomey-Calavi, Benin); Ahmed Dooguy Kora (Ecole Supérieure Multinationale de Télécommunications, Senegal) |
| 1:45 PM – 2:00 PM | 1570779060 | The Role of User's Native Language in Mis/Disinformation Detection: The Case of English | Kevin Matthe Caramancion (University at Albany, SUNY, USA) |

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| SESSION 8: BIG DATA AND ANALYTICS | | | |
|---|------------|--|--|
| SESSION CHAIR : EMAN ABDELFAH (RAMAPO COLLEGE OF NEW JERSEY, USA) | | | |
| SESSION TIME: 12:30 PM – 2:00 PM (DAY 1: 26 th January 2022) | | | |
| PARTICIPATION LINK: https://zoom.us/j/4897406939 | | | |
| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
| 12:30 PM – 12:45 PM | 1570784174 | Detection of Hate Texts Posted by Chadians on Facebook Using Machine Learning Algorithm | Mahamat Saleh Adoum Sanoussi and Chen Xiaohua (Huzhou University, China); George K. Agordzo (Anhui University of Science and Technology, China) |
| 12:45 PM – 1:00 PM | 1570784590 | Efficient Large Scale NLP Feature Engineering With Apache Spark | Maryam Heidari (George Mason University, USA); Armin Esmailzadeh (University of Nevada Las Vegas, USA) |
| 1:00 PM -1:15 PM | 1570784574 | Privacy-Preserving Federated Learning Model for Healthcare Data | Tanzir Ul Islam (University of Manitoba, Canada); Reza Ghasemi (Bu-Ali Sina University, Iran); Noman Mohammed (University of Manitoba, Canada) |
| 1:15 PM – 1:30 PM | 1570784099 | Employability Prediction of Engineering Graduates Using Ensemble Classification Modeling | Renato R. Maaliw III and Karen Anne C. Quing (Southern Luzon State University, Philippines); Ace C. Lagman (FEU Institute of Technology, Philippines); Melvin A. Ballera (Technological Institute of the Philippines, Philippines) |
| 1:30 PM – 1:45 PM | 1570778706 | Development A Web Application for Lawyer and Client Virtual Communication | Mohammad Monirujjaman Khan (North South University & Queen Mary University of London, Bangladesh); Priyanka Dixit (UIT RGPV Bhopal, India) |
| 1:45 PM – 2:00 PM | 1570780410 | Factors Affecting Vietnamese People's Intention to Buy Health Care Products Online During Covid-19 | Nguyen Thi Phuong Giang (Industrial University of HoChiMinh City, Vietnam & Ho Chi Minh City, Vietnam) |

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DAY 2: 27th January 2022

| TIME | NAME OF THE EVENT | PARTICIPATION LINK |
|---------------------|---|---|
| 8.30 AM - 9.15 AM | KEYNOTE ADDRESS BY EDITH ELKIND (PROFESSOR, OXFORD UNIVERSITY) TITLE OF TALK: UNITED FOR CHANGE: DELIBERATIVE COALITION FORMATION TO CHANGE THE STATUS QUO | https://zoom.us/j/6319961197 |
| 9.15 AM – 10.00 AM | KEYNOTE ADDRESS BY GEOFFREY FOX (PROFESSOR, UNIVERSITY OF VIRGINIA) TITLE OF TALK: AI FOR SCIENCE ILLUSTRATED BY DEEP LEARNING FOR GEOSPATIAL TIME SERIES | |
| 10.00 AM - 10.45 AM | KEYNOTE ADDRESS BY ADEL AHMADYAN (SENIOR RESEARCH ENGINEER, GOOGLE CORE ML TEAM) TITLE OF TALK: ON DEVICE MACHINE LEARNING FOR MOBILE AND WEB | |

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|---------------------|--------------|
| 10:45 AM – 11:00 AM | BREAK |
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All the timings are given in Pacific Standard Time (PST (UTC-8))

Day 2: 27th January 2022

| TIME | PARALLEL SESSION | PARTICIPATION LINK |
|---------------------|--|---|
| 11:00 AM – 12.30 PM | ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING | https://zoom.us/j/4109219194 |
| 11:00 AM – 12.30 PM | ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING | https://zoom.us/j/6626883577 |
| 11:00 AM – 12.30 PM | BIG DATA MANAGEMNT AND ANALYTICS | https://zoom.us/j/9587888372 |
| 11:00 AM – 12.30 PM | BIOMEDICAL COMPUTING ; BIOINFORMATICS | https://zoom.us/j/4897406939 |
| 12:30 PM – 12:45 PM | -----BREAK----- | --NA-- |
| 12:45 PM – 2:15 PM | ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING | https://zoom.us/j/4109219194 |
| 12:45 PM – 2:15 PM | ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING | https://zoom.us/j/6626883577 |
| 12:45 PM – 2:15 PM | CLOUD COMPUTING AND AI | https://zoom.us/j/9587888372 |
| 12:45 PM – 2:15 PM | COMPUTATIONAL INTELLIGENCE AND CLOUD COMPUTING | https://zoom.us/j/4897406939 |

All the timings are given in Pacific Standard Time (PST (UTC-8))

PARALLEL SESSIONS

SESSION 9: ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

SESSION CHAIR : HAYSSAM EL-RAZOUK (CALIFORNIA STATE UNIVERSITY, FRESNO)

SESSION TIME: 11:00 AM – 12.30 PM (DAY 2: 27th January 2022)

PARTICIPATION LINK: <https://zoom.us/j/4109219194>

| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
|---------------------|------------|--|---|
| 11:00 AM – 11:15 AM | 1570782927 | A Comparative Analysis of the Ensemble Models for Detecting GPS Spoofing Attacks on UAVs | Aydan Gasimova, Tala Talaei Khoei and Naima A Kaabouch (University of North Dakota, USA) |
| 11:15 AM – 11:30 AM | 1570783019 | Ransomware Classification and Detection With Machine Learning Algorithms | Hossain Shahriar, Mohammad Masum, Md Jobair Hossain Faruk, Kai Qian and Dan Chia-Tien Lo (Kennesaw State University, USA); Muhaiminul Adnan (United International University, Bangladesh) |
| 11:30 AM – 11:45 AM | 1570783048 | ECG Data Analysis With IoT and Machine Learning | Abhigya Pote Shrestha and Chen-Hsiang Yu (Wentworth Institute of Technology, USA) |
| 11:45 AM - 12:00 PM | 1570783456 | Analysis of Covid-19 Waves in Morocco Using Machine Learning | Patrick Loola Bokonda (Mohammed V University in Rabat - Ecole Mohammadia d'Ingénieurs (EMI) & Siweb Laboratory, Morocco); Abdelhamid El krem, Olivier Jan Sonkeng and Dior Masrané Reoukadjji (Research Team, Kavaa Global Services, Morocco) |
| 12:00 PM -12:15 PM | 1570783525 | A Light Boosting-Based ML Model for Detecting Deceptive Jamming Attacks on UAVs | Hadjar Ould Slimane, Selma Benouadah, Tala Talaei Khoei and Naima A Kaabouch (University of North Dakota, USA) |
| 12:15 PM - 12:30 PM | 1570783568 | Autonomous Valet Parking With Asynchronous Advantage Actor-Critic Proximal Policy Optimization | Teck Chai Tiong (Curtin University Sarawak, Malaysia); Ismail Saad (Universiti Malaysia Sabah, Malaysia); Kenneth Tze Kin Teo (Universiti Malaysia Sabah & Modelling, Simulation & Computing Laboratory, Malaysia); Herwansyah bin Lago (University Malaysia Sabah, Malaysia) |

All the timings are given in Pacific Standard Time (PST (UTC-8))

| SESSION 10: ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING | | | |
|---|------------|---|--|
| SESSION CHAIR : | | | |
| SESSION TIME: 11:00 AM – 12.30 PM (DAY 2: 27 th January 2022) | | | |
| PARTICIPATION LINK: https://zoom.us/j/6626883577 | | | |
| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
| 11:00 AM – 11:15 AM | 1570783636 | Real-Time Face Mask Detection for COVID-19 Prevention | Mohammad Rezaul Karim Sujon, Md. Jaki Al Amin, Md Mahbubur Rahman, Md Rasel Hossain and Chinmay Bepery (Patuakhali Science and Technology University, Bangladesh) |
| 11:15 AM – 11:30 AM | 1570783699 | Bangla Food Review Sentimental Analysis Using Machine Learning | Mohd. Istiaq Hossain Junaid, Faisal Hossain, Udyan Saha Upal and Anjana Tameem (North South University, Bangladesh); Abul Kashim (Electrical and Computer Engineering North South University Bangladesh, Bangladesh) |
| 11:30 AM – 11:45 AM | 1570783701 | Efficient Email Phishing Detection Using Machine Learning | Rana Abdulraheem, Ammar J Odeh and Mustafa Ahmad Al-Fayoumi (Princess Sumaya University for Technology, Jordan) |
| 11:45 AM - 12:00 PM | 1570783777 | Alternative Methodology and Framework for Assessing Differential Privacy Constraints and Consequences From a GDPR Perspective | Dmitry Prokhorenkov (Technical University of Munich, Germany) |
| 12:00 PM -12:15 PM | 1570783891 | Convolutional Neural Network Implementations Using Vitis AI | Minoru Watanabe (Okayama University) |
| 12:15 PM - 12:30 PM | 1570784053 | Lightweight Computer Vision System for Automated Weed Mapping | Saad Abouzahir (University Hassan II, Morocco); Mohamed Sadik (ENSEM / UH2C, Morocco); Essaid Sabir (Hassan II University of Casablanca, Morocco) |

All the timings are given in Pacific Standard Time (PST (UTC-8))

SESSION 11: BIG DATA MANAGEMNT AND ANALYTICS**SESSION CHAIR : MICHAEL W TOTARO (UNIVERSITY OF LOUISIANA AT LAFAYETTE & RAY P. AUTHEMENT COLLEGE OF SCIENCES, USA)****SESSION TIME: 11:00 AM – 12.30 PM (DAY 2: 27th January 2022)****PARTICIPATION LINK: <https://zoom.us/j/9587888372>**

| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
|----------------------|-----------------|--|--|
| 11:00 AM – 11:15 AM | 1570783390 | U.S. Wildfire Risks and Prevention | Eman Abdelfattah and Tenzin Sherpa (Ramapo College of New Jersey, USA) |
| 11:15 AM – 11:30 AM | 1570784223 | Contactless Payments Through E-Wallets on Mobile Devices in the Context of Covid 19 at VietNam | Nguyen Thi Phuong Giang (Industrial University of HoChiMinh City, Vietnam & Ho Chi Minh City, Vietnam); Nguyen Phuong Duy (Industry University of Ho Chi Minh City, Vietnam) |
| 11:30 AM – 11:45 AM | 1570784510 | Modeling the Civil Servant Discipline in Indonesia: PLS-SEM Approach | Nur Soelaiman (Universiti Teknikal Melaka Malaysia, Malaysia); Sharifah Sakinah Syed Ahmad and Othman Mohd (Universiti Teknikal Malaysia Melaka, Malaysia); Hexa Hidayah (Universitas Jenderal Soedirman, Indonesia); Rosyid R Al Hakim (Jakarta Global University, Indonesia) |
| 11:45 AM - 12:00 PM | 1570784531 | Sentiment Analysis High_School' Feedback for Predicting Career Possibilities | Nguyen Thi Phuong Giang (Industrial University of HoChiMinh City, Vietnam & Ho Chi Minh City, Vietnam) |
| 12:00 PM -12:15 PM | 1570784543 | A Machine Learning and Explainable AI Approach for Predicting Secondary School Student Performance | Khan Md. Hasib (Ahsanullah University of Science and Technology & BRAC University, Bangladesh); Farhana Rahman, Rashik Hasnat and Md. Golam Rabiul Alam (BRAC University, Bangladesh) |
| 12:15 PM - 12:30 PM | 1570784582 | Autoregressive Modeling of Utility Customer Outages With Deep Neural Networks | Kingsley Udeh, David W. Wanik, Diego Cerrai, Derek C Aguiar and Emmanouil Anagnostou (University of Connecticut, USA) |

All the timings are given in Pacific Standard Time (PST (UTC-8))

| SESSION 12: BIOMEDICAL COMPUTING ; BIOINFORMATICS | | | |
|---|------------|---|--|
| SESSION CHAIR: FANG LIU (GEORGIA INSTITUTE OF TECHNOLOGY, USA) | | | |
| SESSION TIME: 11:00 AM – 12:30 PM (DAY 2: 27th January 2022) | | | |
| PARTICIPATION LINK: https://zoom.us/j/4897406939 | | | |
| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
| 11:00 AM – 11:15 AM | 1570784350 | An FPGA-Based Piecewise Linear Spiking Neuron for Simulating Bursting Behavior | Xiaomei Pi and Xianghong Lin (Northwest Normal University, China) |
| 11:15 AM – 11:30 AM | 1570784475 | On Label Languages of Homogeneous Variant of SNPSSP (HSNPSSP) | Prithwineel Paul and Soumadip Ghosh (IEM KOLKATA, India) |
| 11:30 AM – 11:45 AM | 1570784110 | Interpretable Learning Model for Lower Dimensional Feature Space: A Case Study With Brown Spot Detection in Rice Leaf | Md Amit Khan (Silicon Orchard Ltd, Bangladesh); Nafiz Sadman (Silicon Orchard R&D lab, USA); Kishor Datta Gupta (University of Memphis, USA); Jesan Ovi (East West University, Bangladesh) |
| 11:45 AM - 12:00 PM | 1570784118 | Evaluation of the Deep Learning-Based m-Health Application Using Mobile App Development and Assessment Guide | Christopher G. Estonilo (Technological Institute of the Philippines-Manila & Cavite State University-CCAT, Philippines); Enrique Festijo (Technological Institute of the Philippines, Philippines) |
| 12:00 PM -12:15 PM | 1570784470 | Using EEG and fNIRS Signals as Polygraph | Mohammad A Khalil, Maria Ramirez and Kiran George (California State University, Fullerton, USA) |
| 12:15 PM - 12:30 PM | 1570784553 | Performance Analysis of Convolutional Neural Network Architectures for the Identification of COVID-19 From Chest X-Ray Images | Tanvir Anjum and Tanzil Ebad Chowdhury (Leading University, Bangladesh); Shadman Sakib (Leading University, Bangladesh & International University of Business Agriculture and Technology, Bangladesh); Shafkat Kibria (Leading University, Bangladesh) |

All the timings are given in Pacific Standard Time (PST (UTC-8))

| | |
|---------------------|--------------|
| 12:30 PM – 12:45 PM | BREAK |
|---------------------|--------------|

PARALLEL SESSIONS

SESSION 13: ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

SESSION CHAIR : NAIMA A KAABOUC (UNIVERSITY OF NORTH DAKOTA, USA)

SESSION TIME: 12:45 PM – 2:15 PM (DAY 2: 27th January 2022)

PARTICIPATION LINK: <https://zoom.us/j/4109219194>

| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
|--------------------|------------|---|---|
| 12:45 PM – 1:00 PM | 1570784108 | MLOps - Definitions, Tools and Challenges | Georgios Symeonidis (Athena Research and Innovation Centre, Greece); Evangelos Nerantzis, Apostolos Kazakis and George A Papakostas (International Hellenic University, Greece) |
| 1: 00 PM – 1:15 PM | 1570784124 | Analysis and Exploratory of Lecture Preparation Process to Improve the Conformance Using Process Mining | Ria Rahmawati, Rachmadita Andreswari and Rokhman Fauzi (Telkom University, Indonesia) |
| 1:15 PM – 1:30 PM | 1570784231 | Analysing Tweets on COVID-19 Vaccine: A Text Mining Approach | Swetha Gottipati (S P Jain School of Global Management, Singapore); Debashis Guha (SP Jain School of Global, India) |
| 1:30 PM – 1:45 PM | 1570784266 | Detection of Northern Corn Leaf Blight Disease in Real Environment Using Optimized YOLOv3 | Brian Song (Roslyn High School, USA); Jeongkyu Lee (Northeastern University, USA) |
| 1:45 PM - 2:00 PM | 1570784315 | A Lightweight Multilayer Machine Learning Detection System for Cyber-Attacks in WSN | Shereen Ismail (University of North Dakota, USA); Diana Dawoud (University of Dubai, United Arab Emirates); Hassan Reza (University of North Dakota, USA) |
| 2:00 PM–2:15PM | 1570784191 | Android GUI Test Generation With SARSA | Md Khorrom Khan and Renee Bryce (University of North Texas ,USA) |

All the timings are given in Pacific Standard Time (PST (UTC-8))

SESSION 14: ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING**SESSION CHAIR : CASIMER DECUSATIS (MARIST COLLEGE, USA)****SESSION TIME: 12:45 PM – 2:15 PM (DAY 2: 27th January 2022)****PARTICIPATION LINK: <https://zoom.us/j/6626883577>**

| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
|----------------------|-----------------|--|---|
| 12:45 PM – 1:00 PM | 1570784502 | Performance Analysis of Deep Learning Architectures in Classifying Calamansi (<i>Citrofortunella microcarpa</i>) | Epie F. Custodio (Technological Institute of the Philippines); Alexander Hernandez (Technological Institute of the Philippines - Manila, Philippines) |
| 1: 00 PM – 1:15 PM | 1570784407 | A Novel Skeleton-Based Model With Spine for 3D Human Pose Estimation | Zhaoxu Li, Sheng Liu, Bai Jue, Chenglei Peng, Yang Li and Sidan Du (Nanjing University, China) |
| 1:15 PM – 1:30 PM | 1570784548 | Optimize Mobile Wireless Power Transfer by Finite State Machine Reinforcement Learning | Yuan Xing (University of Wisconsin-Stout, USA); Riley Young, Giaolong Nguyen and Maxwell Lefebvre (University of Wisconsin Stout, USA) |
| 1:30 PM – 1:45 PM | 1570784573 | Improving the Machine Learning Prediction Accuracy With Clustering Discretization | Chunlan Gao and Yanqing Zhang (Georgia State University, USA); Dan Chia-Tien Lo and Yong Shi (Kennesaw State University, USA) |
| 1:45 PM - 2:00 PM | 1570784554 | Benchmarking Conventional Vision Models on Neuromorphic Fall Detection and Action Recognition Dataset | Karthik Sivarama Krishnan (Rochester Institute of Technology, USA & Panimalar Engineering College, India); Koushik Sivarama Krishnan (Panimalar Engineering College, India) |
| 2:00 PM – 2:15 PM | 1570784179 | Software Development Models for IoT | Shereen Ismail (University of North Dakota, USA); Diana Dawoud (University of Dubai, United Arab Emirates) |

All the timings are given in Pacific Standard Time (PST (UTC-8))

| SESSION 15: CLOUD COMPUTING AND AI | | | |
|---|------------|---|---|
| SESSION CHAIR : TAUHEED KHAN MOHD (AUGUSTANA COLLEGE, USA) | | | |
| SESSION TIME: 12:45 PM – 2:15 PM (DAY 2: 27 th January 2022) | | | |
| PARTICIPATION LINK: https://zoom.us/j/9587888372 | | | |
| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
| 12:45 PM – 1:00 PM | 1570782774 | Measuring Consistency Metric for Web Applications | Levent Dane and Deniz Gurkan (University of Houston, USA) |
| 1: 00 PM – 1:15 PM | 1570782505 | My Diary: A Web Application to Accumulate Necessary Files | Mohammad Monirujjaman Khan (North South University & Queen Mary University of London, Bangladesh) |
| 1:15 PM – 1:30 PM | 1570784591 | Monitoring Audio Training Learning Outcomes With EEG Data | Francis X Liri (California State University, Fullerton, USA); Abel Desoto (California State University of Fullerton, USA); Wendy Catalan, Kiran George and Kenneth J Faller II (California State University, Fullerton, USA); Julia R Drouin (California State University Fullerton, USA) |
| 1:30 PM – 1:45 PM | 1570782623 | Optimizing Constraint Driven Container Orchestration Policies in a Cloud Environment | Abhishek Das, Tarun Gupta and Sanketh Reddy (PES University, India); Phalachandra Hallymysore (Pes University, India) |
| 1:45 PM - 2:00 PM | 1570784551 | Development of Smart Telemedicine System | Mohammad Monirujjaman Khan (North South University & Queen Mary University of, Bangladesh) |
| 2:00 PM – 2:15 PM | 1570781329 | An IoT Based Cloud Solution for Intelligent Integrated Rice Fish Farming Using Wireless Sensor Networks and Sensing Meteorological Parameters | Md Ashif Uddin (Khulna University, Bangladesh); Uzzwal Kumar Dey (Khulna University of Engineering & Technology, Bangladesh); Shamama Ahmed Tonima and Toriqul Islam Tusher (Khulna University, Bangladesh) |

All the timings are given in Pacific Standard Time (PST (UTC-8))

| SESSION 16: COMPUTATIONAL INTELLIGENCE AND CLOUD COMPUTING | | | |
|---|------------|---|--|
| SESSION CHAIR : IZZAT ALSMADI (TEXAS A&M SAN ANTONIO, USA) | | | |
| SESSION TIME: 12:45 PM – 2:15 PM (DAY 2: 27 th January 2022) | | | |
| PARTICIPATION LINK: https://zoom.us/j/4897406939 | | | |
| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
| 1:15 PM – 1:30 PM | 1570784243 | Development of Scoliotic Spine Severity Detection Using Deep Learning Algorithms | Nahid Ameer Makhdoomi, Teddy Surya Gunawan, Nur Hanani Idris, Othman Omran Khalifa and Rajandra Kumar Karupiah (International Islamic University Malaysia, Malaysia); Arif Bramantoro (Universiti Teknologi Brunei, Brunei Darussalam); Farah Abdul Rahman and Zamzuri Zakaria (International Islamic University Malaysia, Malaysia) |
| 1:30 PM – 1:45 PM | 1570784521 | Lessons Learned From the Initial Development of a Brain Controlled Assistive Device | Masudul Imtiaz (Clarkson University, USA) |
| 1:45 PM - 2:00 PM | 1570784272 | Secure Access Service Edge: A Zero Trust Based Framework for Accessing Data Securely | Silafu Yiliyaer and Yoohwan Kim (University of Nevada, Las Vegas, USA) |
| 2:00 PM – 2:15 PM | 1570781484 | Design, Implementation and Performance of an Edge Computing Prototype Using Raspberry Pis | Tyler Gizinski and Xiang Cao (Grand Valley State University, USA) |
| 2:15 PM – 2:30 PM | 1570781487 | Goals and Solutions of Data Allocation in Data Center | Xiang Cao (Grand Valley State University, USA) |
| 2:30 PM – 2:45 PM | 1570782780 | Cloud-Based Produce Market for Independent Farmers, Grocers, and Retailers | Mohammad Monirujjaman Khan (North South University & Queen Mary University of London, Bangladesh) |

All the timings are given in Pacific Standard Time (PST (UTC-8))

DAY 3: 28th January 2022

| TIME | NAME OF THE EVENT | PARTICIPATION LINK |
|---------------------|--|---|
| 8.30 AM - 9.15 AM | KEYNOTE ADDRESS BY KEN BIRMAN (PROFESSOR, CORNELL UNIVERSITY) TITLE OF TALK: CASCADE: ULTRA-FAST EDGE COMPUTING FOR INTELLIGENT IOT | https://zoom.us/j/6319961197 |
| 9.15 AM – 10.00 AM | KEYNOTE ADDRESS BY DANIJELA CABRIC (PROFESSOR, UNIVERSITY OF CALIFORNIA, LOS ANGELES) TITLE OF TALK: ULTRA-LOW-LATENCY MILLIMETER WAVE NETWORKING USING TRUE-TIME-DELAY ARRAY ARCHITECTURE | |
| 10.00 AM - 10.45 AM | KEYNOTE ADDRESS BY DJORDJE GLIGORIJEVIC (SENIOR APPLIED RESEARCHER, EBAY) TITLE OF TALK: DEEP LEARNING METHODS FOR MODELING USER BEHAVIOR IN DISPLAY ADVERTISING | |

| | |
|---------------------|--------------|
| 10:45 AM - 11:00 AM | BREAK |
|---------------------|--------------|

| WORKSHOP | |
|---|--------------------|
| Workshop on Internet of Things (IoT) using Raspberry Pi virtual machines (VMs) By Dr. Phillip Bradford (University of Connecticut, Stamford, USA) | 11.00 AM – 2.00 PM |
| PARTICIPATION LINK: https://zoom.us/j/6319961197 | |

All the timings are given in Pacific Standard Time (PST (UTC-8))

DAY 3: 28th January 2022

| TIME | PARALLEL SESSION | PARTICIPATION LINK |
|---------------------|---|---|
| 11:00 AM – 12.15 PM | AI;COMPUTER GRAPHICS, CLOUD | https://zoom.us/j/4109219194 |
| 11:00 AM – 12.30 PM | CRYPTOGRAPHY, ROBOTICS AND MACHINE VISION | https://zoom.us/j/6626883577 |
| 11:00 AM – 12.30 PM | ROBOTICS ; SECURITY | https://zoom.us/j/9587888372 |
| 11:00 AM – 12.30 PM | SECURITY | https://zoom.us/j/4897406939 |
| 11:00 AM – 2:00 PM | WORKSHOP SESSION | https://zoom.us/j/6319961197 |
| 12:30 PM – 12:45 PM | -----BREAK----- | --NA-- |
| 12:45 PM – 2:15 PM | SECURITY AND PRIVACY | https://zoom.us/j/4109219194 |
| 12:45 PM – 2:15 PM | EMBEDDED SYSTEMS ; GREEN COMPUTING ; WIRELESS COMPUTING | https://zoom.us/j/6626883577 |
| 12:45 PM – 2:30 PM | WIRELESS COMPUTING ; COMMUNICATIONS SOFTWARE | https://zoom.us/j/9587888372 |
| 12:45 PM – 2:15 PM | COMMUNICATIONS SOFTWARE ; COGNITIVE RADIO | https://zoom.us/j/4897406939 |

All the timings are given in Pacific Standard Time (PST (UTC-8))

PARALLEL SESSIONS

SESSION 17: AI;COMPUTER GRAPHICS, CLOUD

SESSION CHAIR: HAYSSAM EL-RAZOUK (CALIFORNIA STATE UNIVERSITY, FRESNO)

SESSION TIME: 11:00 AM – 12:15 PM (DAY 3: 28th January 2022)

PARTICIPATION LINK: <https://zoom.us/j/4109219194>

| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
|---------------------|------------|--|--|
| 11:00 AM – 11:15 AM | 1570784586 | FPGA Implementation of Radio Frequency Neural Networks | Amit Bhatia (BAE Systems, USA); Joshua Robinson (BAE Systems, Inc., USA); Joseph Carmack and Scott Kuzdeba (BAE Systems, USA) |
| 11:15 AM – 11:30 AM | 1570784575 | Optical Flow-Based Place Recognition: Bridging the Gap Between Simulation and Real-World Experiments | Sotirios Diamantas (Tarleton State University, USA); Prithviraj Dasgupta (US Naval Research Laboratory, USA) |
| 11:30 AM – 11:45 AM | 1570784577 | An Intelligent System for Safely Managing Traffic Flow of Connected Autonomous Vehicles at Multilane Intersections in Smart Cities | Amin Sahba and Ramin Sahba (The University of Texas at San Antonio, USA) |
| 11:45 AM - 12:00 PM | 1570784456 | Approaches for Migrating Non Cloud-Native Applications to the Cloud | Abhigna L Shastry, Devika S Nair, Prathima B and Ramya C P (PES University, India); Phalachandra Hallymysore (Pes University, India) |
| 12:00 PM -12:15 PM | 1570782751 | Modeling a Simulated Forest to Get Burning Times of Tree Species Using a Digital Twin | Guillermo Sanchez-Guzman (Escuela Superior Politécnica del Litoral, Ecuador);Washington Velasquez (Escuela Superior Politecnica del Litoral, Ecuador);ManuelAlvarez-Alvarado (Escuela Superior Politécnica del Litoral, Ecuador) |

All the timings are given in Pacific Standard Time (PST (UTC-8))

SESSION 18: CRYPTOGRAPHY, ROBOTICS AND MACHINE VISION**SESSION CHAIR :RANIA HUSSEIN (UNIVERSITY OF WASHINGTON , USA)****SESSION TIME: 11:00 AM – 12:30 PM (DAY 3: 28th January 2022)****PARTICIPATION LINK: <https://zoom.us/j/6626883577>**

| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
|----------------------|-----------------|--|---|
| 11:00 AM – 11:15 AM | 1570782390 | The Design of High Efficiency Voltage Mode Integrated Converter for Glucose Monitoring Systems | Kavyashree Puttananjegowda, Majdi Ababneh and Sylvia Thomas (University of South Florida, USA) |
| 11:15 AM – 11:30 AM | 1570780635 | NTRU & LASH Implemented for Quantum Resistant Blockchain | Chuck Easttom (Georgetown University, USA) |
| 11:30 AM – 11:45 AM | 1570782920 | Reversible Audio Data Hiding Using Samples Greatest Common Factor and Audio Interpolation | Fariz Ardin Adhiyaksa, Mohammad Muzayyin Amrulloh, Tanzilal Mustaqim and Hilya Tsaniya (Institut Teknologi Sepuluh Nopember, Indonesia); Hudan Studiawan (Murdoch University, Australia & Institut Teknologi Sepuluh Nopember, Indonesia); Ary Mazharuddin Shiddiqi (Sepuluh Nopember Institute of Technology, Indonesia) |
| 11:45 AM - 12:00 PM | 1570784291 | Security Analysis of a Key Exchange Protocol Under Dolev-Yao Threat Model Using Tamarin Prover | Bhargav Ram Singam and Odelu Vanga (Indian Institute of Information Technology Sri City, India) |
| 12:00 PM -12:15 PM | 1570782508 | Smart Helmet With Rear View and Accident Detection System for Increased Safety | Mohammad Monirujjaman Khan (North South University & Queen Mary University of London, Bangladesh) |
| 12:15 PM - 12:30 PM | 1570783828 | Modelling and Analysis of a Vertical Wall Robot for Ceiling Inspection | Rizuwana Parween, Yehwen Tan and Rajesh Elara Mohan (Singapore University of Technology and Design, Singapore) |

All the timings are given in Pacific Standard Time (PST (UTC-8))

| SESSION 19: ROBOTICS ; SECURITY | | | |
|---|------------|---|--|
| SESSION CHAIR : SAJJAN SHIVA (UNIVERSITY OF MEMPHIS, USA) | | | |
| SESSION TIME: 11:00 AM – 12:30 PM (DAY 3: 28 th January 2022) | | | |
| PARTICIPATION LINK: https://zoom.us/j/9587888372 | | | |
| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
| 11:00 AM – 11:15 AM | 1570783882 | Estimation of Sloshing Motion in a Wheel-Based Drain Inspection Robot | Rizuwana Parween, Povendhan Arthanaripalayam Palanisamy and Yehwen Tan (Singapore University of Technology and Design, Singapore); Dylan Ng Terntzer (Lionsbot International Pte. Ltd., Singapore); Rajesh Elara Mohan (Singapore University of Technology and Design, Singapore) |
| 11:15 AM – 11:30 AM | 1570782765 | A Comparative Analysis of Buffer Overflow Vulnerabilities in High-End IoT Devices | Blas Molina Calatayud (Ireland); Liam Meany (Dublin City University & Glasnevin Dublin 9, Ireland) |
| 11:30 AM – 11:45 AM | 1570782557 | Vulnerability Analysis and Prevention in a Smart City | Mackenzie R. Zappe (University of Nevada, Reno, USA); Ben Lupton (DePauw University, USA); Jay Thom, Shamik Sengupta and David Feil-Seifer (University of Nevada, Reno, USA) |
| 11:45 AM - 12:00 PM | 1570784014 | The Impact of Purchasing Cyber Insurance on the Enhancement of Operational Cyber Risk Mitigation of U.S. Banks - A Case Study | Thomas Watson and Kutub Thakur (New Jersey City University, USA); Md L Ali (Rider University, USA) |
| 12:00 PM -12:15 PM | 1570783694 | Image Encryption Through Ro'Ssler System, PRNG S-Box and Recama N's Sequence | Mohamed khaled Mohamed F ElBeltagy (Cairo & Dell, Egypt); Wassim Alexan and Abdelrahman Elkhamry (German University in Cairo, Egypt); Mohamed Moustafa (The German International University, Egypt); Hisham Hussein (Universities of Canada, Egypt) |
| 12:15 PM - 12:30 PM | 1570780413 | A Panorama of the Implementation of the General Law for the Protection of Personal Data (LGPD) in Brazil: An Exploratory Survey | Lamara Ferreira (CEETEPS, Brazil); Marcelo Okano (CEETEPS & Faculdade de Tecnologia da UNICAMP, Brazil); Fernanda Aguiar (CEETEPS, Brazil); Henry de Castro Lobo dos Santos (Universidade Estadual de Campinas & Faculdade de Tecnologia, Brazil); Edson Ursini (University of Campinas, Brazil) |

All the timings are given in Pacific Standard Time (PST (UTC-8))

SESSION 20: SECURITY AND PRIVACY**SESSION CHAIR :****SESSION TIME: 11:00 AM – 12:30 PM (DAY 3: 28th January 2022)****PARTICIPATION LINK: <https://zoom.us/j/4897406939>**

| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
|---------------------|------------|---|--|
| 11:00 AM – 11:15 AM | 1570782238 | Best Practices to Secure API Implementations in Core Banking System (CBS) in Banks | Mahbub Ul Alam (Flora Telecom Ltd., Bangladesh); Muhammad Abul Kalam Azad (Eastern Bank Ltd, Bangladesh); Md. Showkat Ali (Banglalink Digital Communication Ltd, Bangladesh) |
| 11:15 AM – 11:30 AM | 1570783974 | Blockchain Based Secured Multipurpose Identity (SMID) Management System for Smart Cities | Abrarul Hassan Rahat, Humayra Tasnin, Mamunur Rashid Rumon, Tassnim Jaman Joti and Tania Akter (BRAC University, Bangladesh); Arif Shakil and Muhammad Iqbal Hossain (Brac University, Bangladesh) |
| 11:30 AM – 11:45 AM | 1570782858 | Detecting and Classifying Self-Deleting Windows Malware Using Prefetch Files | Adam B Duby (United States Military Academy, USA); Teryl Taylor (IBM Research, USA); Gedare Bloom (University of Colorado Colorado Springs, USA); Yanyan Zhuang (University of Colorado, Colorado Springs, USA) |
| 11:45 AM – 12:00 PM | 1570783515 | Evolution of Firewalls: Toward Securer Network Using Next Generation Firewall | Junyan Liang (University of Nevada, Las Vegas (UNLV), USA); Yoohwan Kim (University of Nevada, Las Vegas, USA) |
| 12:00 PM -12:15 PM | 1570782244 | A Framework for Open Source Intelligence Penetration Testing of Virtual Health Care Systems | Casimer DeCusatis, Patrick Peko, Jordan Irving, Maxwell Teache, Christopher Laibach and Jason Hodge (Marist College, USA) |
| 12:15 PM - 12:30 PM | 1570782239 | A Cybersecurity Awareness Escape Room Using Gamification Design Principles | Casimer DeCusatis (Marist College, USA); Brian Gormanly (Marist College & Valley Technologies Group, USA); Erin Alvarico, Omar Dirahoui, Joseph McDonough, Brian Sprague, Michelle Maloney, Brian Mah and Dominick Avitabile (Marist College, USA) |

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|---------------------|--------------|
| 12:30 PM – 12:45 PM | BREAK |
|---------------------|--------------|

All the timings are given in Pacific Standard Time (PST (UTC-8))

PARALLEL SESSIONS

SESSION 21: SECURITY AND PRIVACY

SESSION CHAIR : AMMAR J ODEH (PRINCESS SUMAYA UNIVERSITY FOR TECHNOLOGY, JORDAN)

SESSION TIME: 12:45 PM – 2:15 PM (DAY 3: 28th January 2022)

PARTICIPATION LINK: <https://zoom.us/j/4109219194>

| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
|--------------------|------------|---|--|
| 12:45 PM – 1:00 PM | 1570784058 | Physical Layer Security Improvement of Dual-Hop Dual-Relay Network Using Signal Space Diversity | M. Ajmal Khan (Bowling Green State University, USA); Firas Hassan and Rhys Davies (Ohio Northern University, USA) |
| 1:00 PM – 1:15 PM | 1570784131 | Evil-Twin Browsers: Using Open-Source Code to Clone Browsers for Malicious Purposes | Mathew David H Salcedo (University of Nevada, Las Vegas, USA); Mehdi Abid (University of Nevada Las Vegas, USA); Yoohwan Kim and Ju-Yeon Jo (University of Nevada, Las Vegas, USA) |
| 1:15 PM – 1:30 PM | 1570784207 | DER Communication Networks and Their Security Issues | Ki O Chan, Yoohwan Kim and Ju-Yeon Jo (University of Nevada, Las Vegas, USA) |
| 1:30 PM – 1:45 PM | 1570784419 | An Overview on Detection and Prevention of Application Layer DDoS Attacks | Samuel Black (University of Nevada Las Vegas, USA); Yoohwan Kim (University of Nevada, Las Vegas, USA) |
| 1:45 PM - 2:00 PM | 1570784488 | States of Attack Under Incomplete Information | Aliyu Tanko Ali and Damas Gruska (Comenius University in Bratislava, Slovakia) |
| 2:00 PM – 2:15 PM | 1570784511 | Privacy Attacks Based on Correlation of Dataset Identifiers: Assessing the Risk | Oleksii Podoliaka (National Aerospace University, NAU KhAI, USA); Virginia Mushkatblat (Hush-Hush, USA); Adam Kaplan (California State University Northridge, USA) |

All the timings are given in Pacific Standard Time (PST (UTC-8))

| SESSION 22: EMBEDDED SYSTEMS ; GREEN COMPUTING ; WIRELESS COMPUTING | | | |
|--|-----------------|---|--|
| SESSION CHAIR : MUATH OBAIDAT (CITY UNIVERSITY OF NEW YORK ,USA) | | | |
| SESSION TIME: 12:45 PM – 2:15 PM (DAY 3: 28th January 2022) | | | |
| PARTICIPATION LINK: https://zoom.us/j/6626883577 | | | |
| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
| 12:45 PM – 1:00 PM | 1570784287 | Improved Control Strategy for 4WD Electric Vehicle Using Direct Torque Control Technique With Space Vector Modulation | Zuhair Alqarni (ALBAHA University, Saudi Arabia) |
| 1:00 PM – 1:15 PM | 1570784504 | A Brief Survey of Fault Tolerant Techniques for Field Programmable Gate Arrays | Raihana Yarzada and Divya Singh (University of California at Davis, USA); Hussain Al-Asaad (University of California, Davis, USA) |
| 1:15 PM – 1:30 PM | 1570782372 | Technoeconomic Analysis for Microgrid Renewable Energy With Battery and Hydrogen Storage | Teck Chai Tiong (Curtin University Sarawak, Malaysia); Kiing Ing Wong (Curtin University of Technology, Malaysia); Wei Kitt Wong (Curtin University, Malaysia); Ing Ming Chew (Curtin University Malaysia, Malaysia) |
| 1:30 PM – 1:45 PM | 1570784297 | Throughput Improvement in Vehicular Communication by Using Low Density Parity Check (LDPC) Code | Utpal Kumar Dey and Robert Akl (University of North Texas, USA); Robin Chataut (Fitchburg State University, USA) |
| 1:45 PM - 2:00 PM | 1570783430 | Achieving High Gain Performance for 5g Millimeter-Wave Transmission With Large Communication | Omar Almesbahi and Abdullah Alqadhi (Hefei University of Technology, China); Mahmood Almesbahi (University of Science and Technology of China, China) |
| 2:00 PM – 2:15 PM | 1570784221 | PARADA: Parking Space Rental and Leasing Application System | Irene L. Balmes (TIP Manila & None, Philippines); Riva Mae Alejandro, Jose Miguel Gamo and Angelu Merry Ilagan (TIP Manila, Philippines) |

All the timings are given in Pacific Standard Time (PST (UTC-8))

| SESSION 23: WIRELESS COMPUTING ; COMMUNICATIONS SOFTWARE | | | |
|---|------------|--|---|
| SESSION CHAIR : EDSON URSINI (UNIVERSITY OF CAMPINAS, BRAZIL) | | | |
| SESSION TIME: 12:45 PM – 2:30 PM (DAY 3: 28 th January 2022) | | | |
| PARTICIPATION LINK: https://zoom.us/j/9587888372 | | | |
| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
| 12:45 PM – 1:00 PM | 1570784172 | Design of 2*1 Patch Array Antenna for 5G Communications Systems Using mm-Wave Frequency Band | Md. Abdul Kader Jilani (Daffodil International University, Bangladesh); Md. Arman Hossain (Daffodil International University, Bangladesh); Farzana Yeasmin Lamia, Md. Afzalur Rahman, Adiba Haque Sharker and Md Rezwatul Ahsan (Daffodil International University, Bangladesh) |
| 1:00 PM – 1:15 PM | 1570784402 | Load Balancing Call Admission Control Algorithm (CACA) Based on Soft-Handover in 5G Networks | Aymen Zreikat (American University of the Middle East, Kuwait) |
| 1:15 PM – 1:30 PM | 1570780474 | Design and Implementation of Mobile Applications for Military Personnel Based on SIP (Session Initiation Protocol) | Sandhya Hizrian Sabila, I Wayan Mustika and Selo Sulisty (Universitas Gadjah Mada, Indonesia) |
| 1:30 PM – 1:45 PM | 1570783283 | Assessing 3.5 GHz Frequency for 5G New Radio (NR) Implementation in Indonesia's Urban Area | Putri Rahmawati, Muhammad Imam Nashiruddin and Ahmad Tri Hanuranto (Telkom University, Indonesia); Akhmad Akhmad (Telkomsel, Indonesia) |
| 1:45 PM - 2:00 PM | 1570783549 | Simulation of 5G Dense-Urban Deployment at 3.5 GHz Frequency: A Case Study of Central Jakarta | Muhammad Adam Nugraha (Peruri Research Institute for Authenticity (PRiA), Indonesia); Muhammad Imam Nashiruddin and Ahmad Tri Hanuranto (Telkom University, Indonesia); Akhmad Akhmad (Telkomsel, Indonesia) |
| 2:00 PM – 2:15 PM | 1570780000 | Simulation and Experimental Study of a Power Amplifier Behaviour to Enhance Relay Node Co-Operative SDR Platform: Performance Analysis | Randy Verdecia-Peña and José I. Alonso (Universidad Politécnica de Madrid, Spain) |
| 2:15 PM - 2:30 PM | 1570784211 | MPTCP Performance Simulation in Multiple LEO Satellite Environment | Chol Hyun Park (University of Nevada Las Vegas, USA); Phillipe Austria, Yoohwan Kim and Ju-Yeon Jo (University of Nevada, Las Vegas, USA) |

All the timings are given in Pacific Standard Time (PST (UTC–8))

| SESSION 24: COMMUNICATIONS SOFTWARE;COGNITIVE RADIO;OPTICAL NETWORKS | | | |
|---|------------|--|---|
| SESSION CHAIR : DENIZ GURKAN (UNIVERSITY OF HOUSTON, USA) | | | |
| SESSION TIME: 12:45 PM – 2:15 PM (DAY 3: 28 th January 2022) | | | |
| PARTICIPATION LINK: https://zoom.us/j/4897406939 | | | |
| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
| 12:45 PM – 1:00 PM | 1570783567 | Message Parsing Based on Structure Description in IoT for Electric Power and Energy Systems | Ruizhe Ma (Shanghai Institute of Microsystems and Information Technology, Chinese Academy of Sciences & University of Chinese Academy of Sciences, China); Chong Tan (Shanghai Institute of Microsystem and Information Technology & Chinese Academy of Sciences, China); Liu Hong (Shanghai Institute of Microsystem And Information Technology, CAS, China); Min Zheng (Chinese Academy of Sciences, China) |
| 1:00 PM – 1:15 PM | 1570784008 | Reliable Messaging of Dynamic Content Streams From AMQP to NORM Protocol-Based Systems | Ambar Prajapati (International Paper & University of Memphis, USA) |
| 1:15 PM – 1:30 PM | 1570784596 | A Scalable Self-Learning Chatbot for Classroom | Yanyan Li and Christopher Martin (California State University San Marcos, USA) |
| 1:30 PM – 1:45 PM | 1570780326 | Implementation and Evaluation of Spectrum Sharing Technology Using Smart Contract | Nobuo Suzuki and Tatsuya Yoshioka (Advanced Telecommunications Research Institute International, Japan); Akio Hasegawa (ATR Adaptive Communications Research Lab., Japan); Hiroyuki Yokoyama (ATR, Japan); Toshiyuki Maeyama (Takushoku University, Japan) |
| 1:45 PM - 2:00 PM | 1570784589 | Study on the Nano-Plasmonics and Plasmonic Materials to Improve Photon Absorption in Optical Devices | Richard Kyung and Daniel Seungmin Lee (CRG-NJ, USA) |
| 2:00 PM – 2:15 PM | 1570782137 | An Investigation of Clinical Laser Applications in Dentistry; A Review and Outlook | Morteza Modarresi Asem (Tehran Medical Sciences University, Iran); Matineh Ghafoorian Eshghi (Tehran Medical Sciences, Iran) |

All the timings are given in Pacific Standard Time (PST (UTC-8))

DAY 4: 29th January 2022

| TIME | NAME OF THE EVENT | PARTICIPATION LINK |
|---------------------|---|---|
| 8.30 AM - 9.15 AM | KEYNOTE ADDRESS BY PAVEL DMITRIEV (VICE PRESIDENT OF DATA SCIENCE, OUTREACH) TITLE OF TALK: CASCADE: A/B TESTING A.I. | https://zoom.us/j/6319961197 |
| 9.15 AM – 10.00 AM | KEYNOTE ADDRESS BY ALYSSA B. APSEL (PROFESSOR, CORNELL UNIVERSITY) TITLE OF TALK: UBIQUITOUS, SEAMLESS, AND FUTURE PROOFED: HOW WIRELESS CIRCUITS CAN PUSH IOT | |
| 10.00 AM - 10.45 AM | KEYNOTE ADDRESS BY BRIAN A. BARSKY (PROFESSOR, UNIVERSITY OF CALIFORNIA, BERKELEY) TITLE OF TALK: HOW PRIORITIZING PROFITS OVER SAFETY CREATED THE DEADLY BOEING 737 MAX AND ITS ILL-CONCEIVED AUTOMATED SOFTWARE | |

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|---------------------|-------|
| 10:45 AM – 11:00 AM | BREAK |
|---------------------|-------|

All the timings are given in Pacific Standard Time (PST (UTC-8))

DAY 4: 29th January 2022

| TIME | PARALLEL SESSION | PARTICIPATION LINK |
|---------------------|---|---|
| 11:00 AM – 12.15 PM | SECURITY ; UBIQUITOUS COMPUTING | https://zoom.us/j/4109219194 |
| 11:00 AM – 12.15 PM | HCI, INFORMATION THEORY, SOFTWARE DEFINED NETWORKS | https://zoom.us/j/6626883577 |
| 11:00 AM – 12.15 PM | QUANTUM COMPUTING, SIGNAL AND IMAGE PROCESSING | https://zoom.us/j/9587888372 |
| 11:00 AM – 12.15 PM | SIGNAL AND IMAGE PROCESSING ; SENSOR NETWORKS | https://zoom.us/j/4897406939 |
| 12:15 PM – 12:30 PM | ----- BREAK----- | --NA-- |
| 12:30 PM – 1:45 PM | CONTROL SYSTEMS AND APPLICATIONS ; NETWORK SIMULATION | https://zoom.us/j/4109219194 |
| 12:30 PM – 1:45 PM | CONTROL SYSTEM, WIRELESS COMMUNICATION | https://zoom.us/j/6626883577 |
| 12:30 PM – 1:45 PM | WIRELESS COMMUNICATION | https://zoom.us/j/9587888372 |

All the timings are given in Pacific Standard Time (PST (UTC-8))

PARALLEL SESSIONS

| SESSION 25: SECURITY ; UBIQUITOUS COMPUTING | | | |
|---|------------|--|---|
| SESSION CHAIR: INDIRA K DUTTA (ARKANSAS TECH UNIVERSITY, USA) | | | |
| SESSION TIME : 11:00 AM –12:15 PM (DAY 4: 29 th January 2022) | | | |
| PARTICIPATION LINK: https://zoom.us/j/4109219194 | | | |
| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
| 11:00 AM – 11:15 AM | 1570784588 | Securing Wireless Signals Using Artificial Phase Noise | M. Ajmal Khan (Bowling Green State University, USA); Rhys Davies and Firas Hassan (Ohio Northern University, USA) |
| 11:15 AM – 11:30 AM | 1570784597 | Optimization of Survivability of a Mission Critical System in the Presence of Hardware Trojans | Laurent Njilla (Air Force Research Laboratory, USA); Swastik Brahma (Tennessee State University, USA); Mohammad A Rahman (Tuskegee University, USA) |
| 11:30 AM – 11:45 AM | 1570783387 | The Role of a Light-Based Quantum Computational Model in the Creation of an Oscillating Universe | Pravir Malik (Deep Order Technologies, USA) |
| 11:45 AM - 12:00 PM | 1570782190 | A Multi-Level Morphological and Stochastic Tagalog Stemming Template | Great Allan Mañibo Ong and Melvin A. Ballera (Technological Institute of the Philippines, Philippines) |
| 12:00 PM -12:15 PM | 1570782731 | User-Centered Design to Improve Personal Development in Comic Application | Ricky Djamaluddin (Telkom University, Indonesia); Yudi Priyadi (Universitas Telkom, Indonesia) |

All the timings are given in Pacific Standard Time (PST (UTC-8))

SESSION 26: HCI, INFORMATION THEORY, SOFTWARE DEFINED NETWORKS**SESSION CHAIR: TAUHEED KHAN MOHD (AUGUSTANA COLLEGE, USA)****SESSION TIME : 11:00 AM –12:15 PM (DAY 4: 29th January 2022)****PARTICIPATION LINK: <https://zoom.us/j/6626883577>**

| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
|----------------------|-----------------|---|---|
| 11:00 AM – 11:15 AM | 1570782692 | Usability Measurement in User Interface Design Using Heuristic Evaluation & Severity Rating (Case Study: Mobile TA Application Based on MVVM) | Muhammad Irsyad Sabiqun Bil Khairat (Telkom University, Indonesia); Yudi Priyadi (Universitas Telkom, Indonesia) |
| 11:15 AM – 11:30 AM | 1570784362 | Elimination Algorithm for Group Brain-Computer Interface System | Haiying Ren (China Academy of Information and Communications Technology (CAICT), China); Xinxuan Huang (Internet Society of China, China); Xiaoyong Tang (China Mobile(Chengdu) Industrial Research Institute, China) |
| 11:30 AM – 11:45 AM | 1570783049 | Rate-Configurable SC-LDGM Codes Concatenated With Zipper Codes for Optical Communication | Yixin Wang and Xiao Ma (Sun Yat-sen University, China) |
| 11:45 AM - 12:00 PM | 1570782968 | Collaborative Route Management to Mitigate Congestion in Multi-Domain Networks Using SDN | You-Chiun Wang (National Sun Yat-Sen University, Taiwan); Li-Chia Yen (NSYSU, Taiwan) |
| 12:00 PM -12:15 PM | 1570784379 | Dynamic On-Demand Virtual Extensible LAN Tunnels via Software-Defined Wide Area Networks | Georgi Zakurdaev, Hamood Ismail and Chung-Horng Lung (Carleton University, Canada) |

All the timings are given in Pacific Standard Time (PST (UTC-8))

| SESSION 27: QUANTUM COMPUTING, SIGNAL AND IMAGE PROCESSING | | | |
|---|------------|---|--|
| SESSION CHAIR: FADEL LASHHAB (HOWARD UNIVERSITY , USA) | | | |
| SESSION TIME : 11:00 AM –12:15 PM (DAY 4: 29 th January 2022) | | | |
| PARTICIPATION LINK: https://zoom.us/j/9587888372 | | | |
| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
| 11:00 AM – 11:15 AM | 1570784336 | Novel Encoding Method for Quantum Syndrome Error Correction | Mummadi Swathi (National Institute of Technology Karnataka, India); Bhawana Rudra (National Institute of Technology Karnataka, Surathkal, India) |
| 11:15 AM – 11:30 AM | 1570780354 | Performance Analysis of a Cylindrical Dielectric Resonator Antenna (CDRA) for the Detection of Early-Stage Stones of the Human Kidney | Fardeen Mahbub and Rashedul Islam (American International University- Bangladesh, Bangladesh) |
| 11:30 AM – 11:45 AM | 1570783375 | An Empirical Model for 1-D Molecular Communication Diffusive Channels Under Reflecting and Absorbing Boundary Conditions | Saqer Qureish B. Alhloul and Uri Rogers (Eastern Washington University, USA) |
| 11:45 AM - 12:00 PM | 1570780355 | Design and Performance Analysis of a Wideband Yagi-Uda Antenna for the Early Stage On-Body Cancer and Tumor Diagnosis | Fardeen Mahbub and Rashedul Islam (American International University- Bangladesh, Bangladesh) |
| 12:00 PM -12:15 PM | 1570780751 | Performance Analysis of Filter Bank Multicarrier With Doppler Effect in Vehicle to Vehicle Communication Channel | Hasna Hanifah Suranto and Titiek Suryani (Institut Teknologi Sepuluh Nopember, Indonesia) |

All the timings are given in Pacific Standard Time (PST (UTC-8))

SESSION 28: SIGNAL AND IMAGE PROCESSING ; SENSOR NETWORKS**SESSION CHAIR: ROBIN CHATAUT (FITCHBURG STATE UNIVERSITY, USA)****SESSION TIME : 11:00 AM –12:15 PM (DAY 4: 29th January 2022)****PARTICIPATION LINK: <https://zoom.us/j/4897406939>**

| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
|----------------------|-----------------|--|--|
| 11:00 AM – 11:15 AM | 1570784490 | Assessing the Information Capacity of Image Based on the Theory of Contrast | Yuriy Romanyshyn (Lviv Polytechnic National University, Ukraine); Sergei Yelmanov (Special Design Office of Television Systems, Ukraine) |
| 11:15 AM – 11:30 AM | 1570784443 | Application of Convolutional Neural Network for Classification of Consumer Preference From Hybrid EEG andFNIRS Signals | Maria Ramirez (California State University, Fullerton, USA); Shima Kaheh (California State University of Fullerton, USA); Mohammad A Khalil and Kiran George (California State University, Fullerton, USA) |
| 11:30 AM – 11:45 AM | 1570784411 | Digital IIR Filter Design Using a Differential Evolution Algorithm With Polar Coordinates | Peter Stubberud (UNLV, USA) |
| 11:45 AM - 12:00 PM | 1570784076 | Implementation of Predistorter for HPA Nonlinearity Mitigation on OQAM FBMC System | S D Prasetyo and Titiek Suryani (Institut Teknologi Sepuluh Nopember, Indonesia) |
| 12:00 PM -12:15 PM | 1570782778 | Design and Analysis of a Compact Wideband V-Band and W-Band Antenna for Healthcare Applications | Mohammad Monirujjaman Khan (North South University & Queen Mary University of London, Bangladesh) |

BREAK : 12:15 PM – 12:30 PM**All the timings are given in Pacific Standard Time (PST (UTC-8))**

| SESSION 29:CONTROL SYSTEMS AND APPLICATIONS ; NETWORK SIMULATION | | | |
|---|------------|--|--|
| SESSION CHAIR: XIANTA JIANG (MEMORIAL UNIVERSITY OF NEWFOUNDLAND, CANADA) | | | |
| SESSION TIME : 12:30 PM – 1:45 PM (DAY 4: 29 th January 2022) | | | |
| PARTICIPATION LINK: https://zoom.us/j/4109219194 | | | |
| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
| 12:30 PM – 12:45 PM | 1570781438 | Design and Sizing of a Microgrid System for a University Community in Nigeria | Stephen Ogbikaya and Mohammad Tariq Iqbal (Memorial University of Newfoundland, Canada) |
| 12:45 PM – 1:00 PM | 1570782744 | Commiteam: Committee Management System | Kareem Al-Nabulsi, Fadi Odeh, Mohammad Kanaan and Ammar JOdeh (Princess Sumaya University for Technology, Jordan) |
| 1:00 PM- 1:15 PM | 1570783963 | Design and Economic Analysis of Solar Powered Drinking Water Reverse Osmosis Desalination System for a Community in Pakistan | Sheikh Usman Uddin and Mohammad Tariq Iqbal (Memorial University of Newfoundland, Canada) |
| 1:15 PM – 1:30 PM | 1570784416 | BBR Congestion Control Analysis With Multipath TCP (MPTCP) and Asymmetrical Latency Subflow | Phillipe Austria (University of Nevada, Las Vegas, USA); Chol Hyun Park (University of Nevada Las Vegas, USA); Ju-Yeon Jo and Yoohwan Kim (University of Nevada, Las Vegas, USA); Rahul Sundaresan (University of North Carolina at Charlotte, USA); Khanh D. Pham (Air Force Research Laboratory/Space Vehicles Directorate & University of New Mexico/Electrical and Computer Engineering Department, USA) |
| 1:30 PM -1:45 PM | 1570783460 | A Comparative Study of Solar Water Pump Storage Systems | Amirhossein Jahanfar and Mohammad Tariq Iqbal (Memorial University of Newfoundland, Canada) |

All the timings are given in Pacific Standard Time (PST (UTC-8))

| SESSION 30: CONTROL SYSTEM, WIRELESS COMMUNICATION | | | |
|---|------------|---|--|
| SESSION CHAIR: SAQER QUREISH B. ALHLOUL (EASTERN WASHINGTON UNIVERSITY, USA) | | | |
| SESSION TIME : 12:30 PM –1:45 PM (DAY 4: 29 th January 2022) | | | |
| PARTICIPATION LINK: https://zoom.us/j/6626883577 | | | |
| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
| 12:30 PM – 12:45 PM | 1570783288 | Design and Optimization of Solar PV System for a Fish Farm in Pakistan | Adnan Sarwar (University of Newfoundland, Canada); Mohammad Tariq Iqbal (Memorial University of Newfoundland, Canada) |
| 12:45 PM – 1:00 PM | 1570784434 | Spectrum Sharing Between Directional-Antenna-Equipped UAV System and Terrestrial Systems | Tao Yu, Kento Kajiwara and Kiyomichi Araki (Tokyo Institute of Technology, Japan); Kei Sakaguchi (Tokyo Institute of Technology & Fraunhofer HHI, Japan) |
| 1:00 PM- 1:15 PM | 1570784536 | Frequency Hopping Acquisition Based on Variable Forgetting Factor Recursive Least Squares Algorithm | Zengmao Chen, Xianwu Zhao, Li Lu and Rongchen Sun (Harbin Engineering University, China); Sun Zhiguo (Harbin Engineering University, Harbin, China) |
| 1:15 PM – 1:30 PM | 1570783579 | Ground Experiment of Full-Duplex Multi-UAV System Enabled by Directional Antennas | Tao Yu and Kiyomichi Araki (Tokyo Institute of Technology, Japan); Kei Sakaguchi (Tokyo Institute of Technology & Fraunhofer HHI, Japan) |
| 1:30 PM -1:45 PM | 1570784489 | Power Control in Local 5G/Beyond Systems Utilizing Spectrum Database and Monte Carlo Stochastic Programming | Tetsuki Taniguchi (University of Electro-Communications, Japan); Takeo Fujii (The University of Electro-Communications, Japan) |

All the timings are given in Pacific Standard Time (PST (UTC-8))

| SESSION 31: WIRELESS COMMUNICATION | | | |
|---|------------|---|--|
| SESSION CHAIR: EDSON URSINI (UNIVERSITY OF CAMPINAS, BRAZIL) | | | |
| SESSION TIME : 12:30 PM –1:45 PM (DAY 4: 29 th January 2022) | | | |
| PARTICIPATION LINK: https://zoom.us/j/9587888372 | | | |
| TIME ALLOTTED | PAPER ID | PAPER NAME | AUTHORS WITH AFFILIATION & COUNTRY |
| 12:30 PM – 12:45 PM | 1570779502 | Joint Analysis of Success and Outage Probability in 5G Multi-Tier Heterogeneous Network | Mobasshir Mahbub (Ahsanullah University of Science and Technology, Bangladesh); Raed Shubair (New York University (NYU) Abu Dhabi, United Arab Emirates); Bobby Barua (BUET & Ahsanullah University of Science and Technology, Bangladesh) |
| 12:45 PM – 1:00 PM | 1570783813 | The Road to 6G, Vision, Drivers, Trends, and Challenges | Ahmed Hassebo (School of Engineering, USA & Wentworth Institute of Technology, USA) |
| 1:00 PM- 1:15 PM | 1570783690 | A Survey From 1G to 5G Including the Advent of 6G: Architectures, Multiple Access Techniques, and Emerging Technologies | A. F. M. Shahen Shah (Yildiz Technical University, Turkey) |
| 1:15 PM – 1:30 PM | 1570783006 | Limitations of Static Autonomous Scheduling for TSCH Protocol and Advances in Adaptive Scheduling | Sana Rekik (ReDCAD Laboratory, National School of Engineers of Sfax, Tunisia) |
| 1:30 PM - 1:45 PM | 1570783120 | A Proposed Method for Synthesizing the Radiation Pattern of Linear Antenna Arrays | Amin Al Ka'bi (Australian College of Kuwait, Kuwait) |

| VALEDICTORY SESSION | 2:15 PM–3:15 PM |
|---|-----------------|
| PARTICIPATION LINK: https://zoom.us/j/6319961197 | |

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