

# CONFERENCE AGENDA

Venue: Cisco Webex Meeting (TBA)

**6 MAY2020**

|                            |   |
|----------------------------|---|
| <b>8.30 am – 8.45 am</b>   | <b>Opening Session</b><br><b>General Chair Welcome Remarks</b><br>Ts. Dr. Fatimah Salim   |
| <b>8.45 am – 9.00 am</b>   | <b>Officiating Address</b><br>Assoc. Prof. Dr. Astuty Amrin<br>Dean, Razak Faculty of Technology and Informatics<br>Universiti Teknologi Malaysia   |
| <b>9.00 am – 9.30 am</b>   | <b>Plenary Speaker 1 (Video)</b><br>Prof. Dr. Marco Mugnaini, University of Siena, Italy<br>Topic: Advanced Reliability, Availability and Safety<br>Design Tools for Industrial Applications  |
| <b>9.40 am – 10.10 am</b>  | <b>Plenary Speaker 2 (Live)</b><br>Dr. Mazlan Abbas, FAVORIOT Sdn. Bhd, Malaysia<br>Topic: IR 4.0 – Embrace or Become Obsolete  |
| <hr/>                      |   |
| <b>10.30 am-1.00 pm</b>    | <b>Parallel Session 1 -Virtual Room 1</b><br><b>Invited Speaker 1:</b><br>Dr. Rudzidatul Akmam Dziyauddin, UTM<br>Topic: Deep Reinforcement Learning Empowered<br>Computation Offloading for Vehicle Edge Computing<br>Track 1: Emerging Technologies, Applications and<br>Services |
| <b>10:30 am – 12:30 pm</b> | <b>Parallel Session 1 -Virtual Room 2</b><br>Track 2: Smart Sensors and Applications  |
| <hr/>                      |   |
| <b>12.30 pm – 1:30 pm</b>  | <b>Break</b>  |
| <hr/>                      |   |
| <b>1:30 pm – 3.30 pm</b>   | <b>Parallel Session 2 -Virtual Room 1</b><br>Track 3: Software Development for Measurement and<br>Instrumentation Support 1   |
| <b>1.30 pm - 4.00 pm</b>   | <b>Parallel Session 2 -Virtual Room 2</b><br>Track 4: Software Development for Measurement and<br>Instrumentation Support 2   |

# CONFERENCE AGENDA

Venue: Cisco Webex Meeting (TBA)

**7 MAY2020**

## **Parallel Session 3 -Virtual Room 1**

Track 5: PHY and Fundamentals

**8.30 am – 10.30 am**

## **Parallel Session 3 -Virtual Room 2**

Track 6: Health Technology

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**10:30 am – 11:00 am**

## **Keynote Address**

### **Keynote Speaker 1**

Ir. Dr. Hafizal Mohamad, MIMOS Berhad

Topic: Internet of Things (IoT)- Overview, Ecosystem and Future Outlook

**11:00 am – 11:30 am**

### **Keynote Speaker 2**

Prof. Dr. Md. Atiqur Rahman Ahad, University of Dhaka

Topic: Human Activity Recognition: Healthcare Perspectives & Others

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**11.30 am – 12:00 pm**

## **Break**

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**12:00 pm – 2.30 pm**

## **Parallel Session 4 -Virtual Room 1**

Track 7: Intelligent Control and Measurement 1

## **Parallel Session 4 -Virtual Room 2**

Track 8: Intelligent Control and Measurement 2

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**2:30 pm – 3.00 pm**

## **Closing & Awards Ceremony**

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**\*Parallel Session 1-4:** *Please refer to specific tentative for details*

# PARALLEL SESSION 1

6 May 2020

Virtual Room 1

Emerging Technologies, Applications and Services

Venue

Cisco Webex Meeting (TBA)

Chairperson

Assoc. Prof. Ts. Dr. Liza Abdul Latiff

Co-chair

Dr. Hazilah Mad Kaidi

## Agenda

### Invited Speaker

Dr. Rudzidatul Akmam Dziyauddin

10:30 am Topic: Deep Reinforcement Learning Empowered Computation Offloading for Vehicle Edge Computing

| Time     | Author(s)  | Paper Title   |
|----------|--|---|
| 10:50 am | Mohammad Emad Alolaby, Rudzidatul Dziyauddin, Liza A. Latiff   | Reduction of HARQ latency for URLLC 5G services based on network slicing and Massive MIMO hybrid beamforming [TAFGEN]     |
| 11.10 am | Suhaila Ab Aziz, Suriani Mohd Sam, Norliza Mohamed, Rudzidatul Dziyauddin  | The Comprehensive Review of Neural Network: An Intelligent Medical Image Compression for Data Sharing [TAFGEN]            |
| 11.30 am | Mohammad Emad Alolaby, Rudzidatul Dziyauddin, Liza A. Latiff, Norulhusna Ahmad   | Survey of Enablers to Overcome Latency in 5G Radio Access Networks [TAFGEN]   |
| 11:50 am | Muhammad Saqib Iqbal, Zulhasni Bin Abdul Rahim, Syed A Hussain, Norulhusna Ahmad, Hazilah Mad Kaidi, Robiah Ahmad, Rudzidatul Dziyauddin | Limitations in the Adoption of Mobile Communication (2G, 3G &4G) and Future Interest of 5G in Pakistan: A Review [TAFGEN] |
| 12.10 pm | Sheemaa Hashim, Rudzidatul Dziyauddin, Mohd Azri Mohd Izhar, Suriani Mohd Sam, Norliza Mohamed   | Internet of Vehicle Layered Architecture and Network Model [TAFGEN]   |
| 12.30 pm | Yong Suan Ong, Nelidya Md. Yusoff, Abdul Hadi Sulaiman, Fairuz Abdullah, Lau Kuen Yao  | Performance Investigation of Dual Wavelength Fiber Laser using different SOAs [TAFGEN]                                    |

\*NOTE: Presentation – 15 mins; Q&A – 5 mins. Titles are accurate as of printing date.

# PARALLEL SESSION 1

6 May 2020

Virtual Room 2

Smart Sensors and Applications

Venue

Cisco Webex Meeting (TBA)

Chairperson

Dr. Mohd. Nabil Bin. Muhtazaruddin

Co-chair

Ts. Dr. Fatimah Salim

## Agenda

| Time     | Author(s)   | Paper Title  |
|----------|---|--|
| 10:30 am | Sofwah Alimin Mahama Chedaod, Aznida Abu Bakar Sajak, Jasrina Jaffar, Mohd Sallehin Mohd Kassim                                     | LoRaWAN based Movement Tracker for Smart Agriculture [ICSSA]                                   |
| 10:50 am | Mohd Sallehin Mohd Kassim, Aznida Abu Bakar Sajak, Mohd Rifqi Rozman, Megat F. Zuhairi  | IoT Water Quality Monitoring for Smart City [ICSSA]  |
| 11.10 am | Muhammad Shakhil Iman Hasnan, Roziyani Rawi, Aznida Abu Bakar Sajak   | Palm Oil Soil Monitoring System for Smart Agriculture [ICSSA]                                  |
| 11.30 am | Kuheli Mondal, Aminudin Abu, Hoong Thiam Toh, Saurav Das, Saikat Das, Akij Ahmad  | An Improved All-Pass Filtered x Least Mean Square Algorithm [ICSSA]                            |
| 11:50 am | Rudzidatul Dziauddin, Airull Azizi Awang Lah, Nelidya Md. Yusoff, Noor Azurati Ahmad, Mohd Ismifaizul Bin Mohd Ismail, Robiah Ahmad | Leakage Localisation Using Cross Correlation for Wireless Three-Axis Vibration Sensors [ICSSA] |
| 12.10 pm | Ana Sakura Zainal Abidin, Mohd Zulhatta Kifli, Annisa Jamali, A.J., Rasli Muslimen, Raudhah Ahmadi                                  | Development of Black Pepper Rotary Drum Dryer System [ICSSA]                                   |

**\*NOTE: Presentation – 15 mins; Q&A – 5 mins. Titles are accurate as of printing date.**

# PARALLEL SESSION 2

6 May 2020

Virtual Room 1

Software Development for Measurement and Instrumentation Support 1

Venue

Cisco Webex Meeting (TBA)

Chairperson

Ts. Dr. Siti Armiza Mohd Aris

Co-chair

Ts. Dr. Nurul Aini Bani

## Agenda

| Time    | Author(s)   | Paper Title  |
|---------|---|--|
| 1:30 pm | Wong Hui Ming, Mitra Mohd. Addi   | Early Detection of Depression using Screening Tools and EEG Signals <a href="#">[ICBAPS]</a>                                 |
| 1:50 pm | Tee Yi Wen, Nurul Aini Bani, Firdaus Muhammad-Sukki, Siti Armiza Mohd Aris  | Electroencephalogram (EEG) Human Stress Level Classification based on Theta/Beta Ratio <a href="#">[ICBAPS]</a>              |
| 2:10 pm | Mamunur Rashid, Norizam Bin Sulaiman, Mahfuzah Mustafa, Bifta Sama Bari, Md Jahid Hasan                           | Five-Class SSVEP Response Detection using Common-Spatial Pattern (CSP)-SVM Approach <a href="#">[ICBAPS]</a>                 |
| 2:30 pm | Tengku 'Afiah Mardhiah Tengku Zainul Akmal, Abd Hafiz Qayyum Abd Talib, Siti Armiza Mohd Aris, Siti Zura A. Jalil | Stress Classification Based on Human Electromagnetic Radiation Analysis <a href="#">[ICBAPS]</a>                             |
| 2:50 pm | Razak Mohd Ali Lee, Terence Jerome Daim   | IR-UWB Radar Sensor for Fine Human Motion Detection <a href="#">[ICSSA]</a>  |
| 3:10 pm | Firdaus Firdaus, Noor Azurati Ahmad, Shamsul Sahibuddin, Rudzidatul Dziauddin                                     | Modelling the Effect of Human Body around User on Signal Strength and Accuracy of Indoor Positioning <a href="#">[ICSSA]</a> |

**\*NOTE: Presentation – 15 mins; Q&A – 5 mins. Titles are accurate as of printing date.**

# PARALLEL SESSION 2

6 May 2020

Virtual Room 2

Software Development for Measurement and Instrumentation Support 2

Venue

Cisco Webex Meeting (TBA)

Chairperson

Assoc. Prof. Dr. Robiah Ahmad

Co-chair

Dr. Rudzidatul Akmam Dziauddin

## Agenda

| Time    | Author(s)   | Paper Title   |
|---------|---|---|
| 1:30 pm | Fikri Aditya, Surya Michrandi Nasution, Agus Virgono                  | Traffic Flow Prediction Using Sumo Application With K- Nearest Neighbor (KNN) Method <a href="#">[ICSSA]</a>  |
| 1:50 pm | Khusnan Hadi Eka Panca Dharma, Surya Michrandi Nasution, Agus Virgono | Level of Services Impact Prediction with Multiclass SVM On Vehicle Speed <a href="#">[ICSSA]</a>  |
| 2.10 pm | Annisa Putri), Agus Virgono), Casi Setianingsih                       | Analysis of Image Processing in Barcode Using The K-Nearest Neighbor (K-NN) Classification <a href="#">[ICSSA]</a>  |
| 2.30 pm | Diah Rahmadani, Agus Virgono, Casi Setianingsih                       | Food Detection Using Histogram of Oriented Gradient (HOG) as Feature Extraction and K-Nearest Neighbors (K-NN) as Classifier <a href="#">[ICSSA]</a>      |
| 2:50 pm | Amjad Malik, Surya Michrandi Nasution, Agus Virgono                   | Traffic Flow Prediction Using Naïve Bayes Based on Measurement of V/c Ratio <a href="#">[ICSSA]</a>   |
| 3.10 pm | Muhammad Rizqi Mubarak, Burhanuddin Dirgantoro and Casi Setianingsih  | Designing a Software as a Decision-Maker to Sell and Buy Stock Using Stochastic Oscillators and Exponential Moving Average Method <a href="#">[ICSSA]</a> |

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# PARALLEL SESSION 3

7 May 2020

Virtual Room 1

PHY and Fundamentals

Venue

Cisco Webex Meeting (TBA)

Chairperson

Dr. Norulhusna Ahmad

Co-chair

Ts. Dr. Suriani Mohd. Sam

## Agenda

| Time     | Author(s)   | Paper Title   |
|----------|---|---|
| 8:30 am  | Yusnita Rahayu,<br>Muhammad Hilmi   | Stair-Hexagonal Slot Antenna with CPW Technique for Biomedical Applications [TAFGEN]                                  |
| 8:50 am  | Siti Harliza Binti Mohd Razali,<br>Razali Ngah, Yoshihide<br>Yamada, Kamilia Kamardin                                 | Patch Antenna for Underwater Wireless Communication in Seawater [TAFGEN]  |
| 9.10 am  | H Heru Abrianto, Norliza<br>Mohamed, Suriani Mohd<br>Sam, Rudzidatul Dziauddin  | Reconfiguration of Double Stub Feeding in Microstrip Antenna Array for WLAN and WiMAX [TAFGEN]                        |
| 9.30 am  | Marita Fauziah, Aloysius<br>Adya Pramudita, Erfansyah<br>Ali  | Self-Complementary Bowtie Antenna with Resistive Loading for Increasing Bandwidth and Reducing Ringing Level [TAFGEN] |
| 9:50 am  | Yusnita Rahayu and<br>Maulana Reza  | Characterization of Flexible Rectangular Slot Antenna for Medical Applications [TAFGEN]                               |
| 10.10 am | Syed A Hussain, Norulhusna<br>Ahmad, Hazilah Mad Kaidi<br>and Liza A. Latiff, Norliza<br>Mohamed, Suriani Mohd<br>Sam | Codebook Design Techniques for Sparse Code Multiple Access [TAFGEN]   |

**\*NOTE: Presentation – 15 mins; Q&A – 5 mins. Titles are accurate as of printing date.**

# PARALLEL SESSION 3

7 May 2020

Virtual Room 2

Health Technology

Venue

Cisco Webex Meeting (TBA)

Chairperson

Ts. Haslaile Abdullah

Co-chair

Ts. Dr. Siti Zura A. Jalil

## Agenda

| Time     | Author(s)   | Paper Title   |
|----------|---|---|
| 8:30 am  | Hannah Sofian, Joel Chia<br>Ming Than, Suraya<br>Mohamad, Norliza Mohd<br>Noor  | Calcification Detection for Intravascular<br>Ultrasound Image using Direct Acyclic<br>Graph Architecture: Pre-Trained Model for<br>1-Channel Image <a href="#">[ICBAPS]</a> |
| 8:50 am  | Muhammad Yahya, Laiq<br>Hasan, Syed Asad Ali  | High-throughput Protein Sequence<br>Alignment on Multi-core Systems <a href="#">[ICBAPS]</a>  |
| 9.10 am  | Mardhati Mahadi, Nurul Aini<br>Bani, Sahnius Usman,<br>Sharipah Alwiah Syed Abd<br>Rahaman, Norliza Mohd<br>Noor, Mohd Nabil<br>Muhtazaruddin | Relationship between Hand Grip and Pinch<br>Strength with Nutritional Health Status<br>Among Indigenous People in Perak,<br>Malaysia <a href="#">[ICBAPS]</a>               |
| 9.30 am  | Nor Azizah Ibrahim, Sharifah<br>Alwiah Syed Abd Rahman,<br>Siti Haida Ismail, Haslaile<br>Abdullah  | Risk Factors Affecting Occupational-<br>related Musculoskeletal Disorder of Tower<br>Crane Operators <a href="#">[ICBAPS]</a>   |
| 9:50 am  | Nuhu Yusuf, Rilwanu Sabo,<br>Maryam Suleiman, Kamalu<br>Marafa, Zainab<br>Abubakar, Kamila Ladan,<br>Aminu Hamza                              | Smart Health Internet of Thing for<br>Continuous Glucose Monitoring: A Survey<br><a href="#">[ICSSA]</a>  |
| 10.10 am | Zuriati Janin, Hazilah Mad<br>Kaidi, Robiah Ahmad,<br>Sheroz Khan   | Derivative Proportional - Integral Controller<br>Using Nelder-Mead Optimization for<br>Glycerin Purification Heating Process<br><a href="#">[ICSSA]</a>                     |

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# PARALLEL SESSION 4

7 May 2020

Virtual Room 1

Intelligent Control and Measurement 1

Venue

Cisco Webex Meeting (TBA)

Chairperson

Ts. Dr. Nelidya Md. Yusoff

Co-chair

Dr. Mohd. Nabil Muhtazaruddin

## Agenda

| Time     | Author(s)   | Paper Title  |
|----------|---|--|
| 12:00 pm | Yogantana Arum Panganti,<br>Erfansyah Ali, Aloysius Adya<br>Pramudita                                     | Design of Microstrip Composite Bandpass<br>Filter for Ground Penetrating Radar<br><a href="#">[TAFGEN]</a>   |
| 12:20 pm | Teddy Andriawan,<br>Erfansyah Ali, Aloysius Adya<br>Pramudita   | Ground Penetrating Radar Analysis for<br>Detecting Void in Concrete <a href="#">[TAFGEN]</a>   |
| 12.40 pm | Noor Iziddin Abdullah<br>Ghazali, Mohd Azri Mohd<br>Izhar, Rudzidatul Dziauddin                           | Energy Cost Reduction for<br>Telecommunication Towers Using Hybrid<br>Energy Storage <a href="#">[TAFGEN]</a>  |
| 1.00 pm  | Bagas Satriyotomo, Heroe<br>Wijanto, Edwar Edwar<br>,Vinsensius Prabowo                                   | Microstrip Antenna with Slotted<br>Rectangular Truncated Corner Patch for<br>ADS-B Receiver on Cubesat <a href="#">[ICSSA]</a>                           |
| 1:20 pm  | Sharizal Fadlie Sabri,<br>Malaysia); Noor Azurati<br>Ahmad,<br>ShamsulSahibuddin,<br>Rudzidatul Dziauddin | Dynamic Frequency Scheduling for<br>CubeSat's On Board and Data Handling<br>Subsystem <a href="#">[ICSSA]</a>  |
| 1.40 pm  | Rudzidatul Dziauddin,<br>Mohd Ismifaizul Bin Mohd<br>Ismail, Fitri Yakub, Yoshihide<br>Yamada             | An RSSI-based Wireless Sensor Node<br>Localisation using Trilateration and<br>Multilateration Methods for Outdoor<br>Environment <a href="#">[ICSSA]</a> |

**\*NOTE: Presentation – 15 mins; Q&A – 5 mins. Titles are accurate as of printing date.**

# PARALLEL SESSION 4

7 May 2020

Virtual Room 2

Intelligent Control and Measurement 2

Venue

Cisco Webex Meeting (TBA)

Chairperson

Dr. Noorlizawati Abd Rahim

Co-Chair

Ts. Haslaile Abdullah

## Agenda

| Time     | Author(s)  | Paper Title   |
|----------|--|---|
| 12:00 pm | Muhammad Ghifari<br>Arfananda, Surya<br>Michrandi Nasution, Casi<br>Setianingsih | Selection of Bandung City Travel Route<br>Using FLOYD-WARSHALL Algorithm <a href="#">[ICSSA]</a>  |
| 12:20 pm | Abdul Aziz, Surya Michrandi<br>Nasution, Casi Setianingsih                       | Analysis Simple Additive Weighting and<br>Genetic Algorithm for Traffic Management<br>System <a href="#">[ICSSA]</a>  |
| 12.40 pm | Nik ahmad kamil,Zainal<br>abidin), Norkharziana<br>Mohd Nayan                    | Analysis of AC-DC converter circuit<br>performance with difference piezoelectric<br>transducer array connection <a href="#">[ICSSA]</a>                       |
| 1.00 pm  | Fatin Hamizah Abdol Rahim<br>Norliza Mohd Noor, Haslaile<br>Abdullah             | Cost Minimization of Aircraft Critical<br>Components for Planning and<br>Maintenance Requirements <a href="#">[ICSSA]</a>                                     |
| 1:20 pm  | Yuen Chark See   | IoT-Based Fire Safety System Using MQTT<br>Communication Protocol <a href="#">[ICSSA]</a>   |
| 1.40 pm  | Yusril Firza, Burhanuddin<br>Dirgantoro, Casi<br>Setianingsih                    | Designing A Software as A Decision Maker<br>to Sell and Buy Stock Using Bollinger Bands<br>and Single Exponential Smoothing Method<br><a href="#">[ICSSA]</a> |

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