

## ECCE-2017: Detail Program Schedule

|                                 |   |  |
|---------------------------------|---|--|
| <b>February 15, 2017</b>        |   |  |
| <b>4:00 pm -<br/>6:00 pm</b>    | <b>Registration and Kit Collection</b><br><b>Venue:</b> Heritage Club ( <i>Level-12</i> ) |  |
| <b>Day 1: February 16, 2017</b> |   |  |
| <b>8:00 am –<br/>9:00 am</b>    | <b>Registration and Kit Collection</b><br><b>Venue:</b> Heritage Club ( <i>Level-12</i> ) |  |
| <b>9:00 am-<br/>10:30 am</b>    | <b>Day-1<br/>Technical<br/>Session-1</b>  | <b>Session Name:</b> Power Electronics and Drives<br><b>Venue:</b> Conference Room Kaptai ( <i>Level-03</i> )<br><b>Session Chair:</b> Prof. Dr. Muhibul Haque Bhuyan, Southeast University, Bangladesh  |
|                                 | 115   | SVPWM Based Vector Control of PMSM Drive in Delta Domain<br><i>Prasanta Sarkar, and Sourav Bhunia</i>  |
|                                 | 152   | Robust Adaptive Backstepping Controller Design for PWM Based DC-DC Buck Converter Based on Projection Method<br><i>T. K. Roy, L. C. Paul, M. F. Pervej, M. I. Sarkar, and F. K. Tumpa</i>  |
|                                 | 246   | Introducing Antiparallel Back to Back Connected Thyristor for Speed Control of Three Phase Induction Motor<br><i>Asif Imran, Sadab Nehal, and Mrinmoy Dey</i>  |
|                                 | 337   | A High Capacity Synchronous Buck Converter for Highly Efficient and Lightweight Charger of Electric Easy Bikes<br><i>Mohammad Rejwan Uddin, Zaima Tasneem, Saila Ishrat Annie, and Khosru M Salim</i>  |
|                                 | 455   | Performance Evaluation of Carrier-Based Modulation Strategies for Modular Cascaded H-bridge Multilevel Converters<br><i>Md. Ashib Rahman, and Md. Rabiul Islam</i>   |
|                                 | 524   | Linking the Features of a Cycloconverter and Controlled Rectifier in a Single Circuit<br><i>Abdullah Mahmud, Taufiquzzaman, Anamul Ahsan, Muhtasheem Ajwad Mahin, and Adnan Mohammad</i>   |
|                                 |   | <b>Session Name:</b> Renewable Energy Technology<br><b>Venue:</b> Conference Hall Sabrang ( <i>Level-02</i> )<br><b>Session Chair:</b> Prof. Dr. Mahmud Abdul Matin Bhuiyan, CUET, Bangladesh<br><b>Session Co-chair:</b> Prof. Dr. Quazi Delwar Hossain, CUET, Bangladesh |
|                                 | 309   | Analysis of 100 kW Grid-Connected Solar Photovoltaic System Developed on the River Deltas of Eight Divisions of Bangladesh Using RETScreen<br><i>Shagorika Mukherjee, and M. Abdur Razzak</i>  |

|  |  |   |
|--|--|---|
| <b>Day-1<br/>Technical<br/>Session-2</b>   | 327  | Modeling of Grid Connected Battery Storage Wave Energy and PV Hybrid Renewable Power Generation<br><i>Shameem Ahmad, Mohammed Jashim Uddin, Injamamul Haq Nisu, Md. Moin-ul Ahsan, Ishtiaq Rahman, and Nahidul Hoque Samrat</i>   |
|  | 420  | Fabrication and Characterization of Flow Harvester<br><i>Avijit Barua, Mohammad Zakaria Sabuj, Mohammad Rayhan Ahmad, and Md Ataur Rahman</i>   |
|  | 495  | Impact of Battery Energy Storage System on Post-Fault Frequency Fluctuation in Renewable Integrated Microgrid<br><i>Shaila Arif, and Tareq Aziz</i>   |
|  | 548  | A Model for Prediction of Monthly Solar Radiation of Different Meterological Locations of Bangladesh Using Artificial Neural Network Data Mining Tool<br><i>Zainal Abedin, Mishuk Barua, Sukanta Paul, Sharmin Akther, Riku Chowdhury, and Md. Sarwar Uddin Chowdhury</i> |
|  | 635  | An Overview of Concentrated Solar Power (CSP)Technologies and its Opportunities in Bangladesh<br><i>Rabiul Islam, A.B.M. Noushad Bhuiyan, and Md.Wali Ullah</i>   |
| <b>Day-1<br/>Technical<br/>Session-3</b>   | <b>Session Name:</b> Computer Vision and Image Processing<br><b>Venue:</b> Conference Room Himchori (Level-02)<br><b>Session Chair:</b> Prof. Dr. Kaushik Deb, CUET, Bangladesh<br><b>Session Co-chair:</b> Prof. Dr. Dr. Boshir Ahmed, RUET, Bangladesh |   |
|  | 154  | Analysis of Statistical Features for Face Recognition based on Holistic Approach<br><i>Soumya Kanti Das, and Lutfu Akter</i>  |
|  | 231  | Implementation and Performance Comparison for two versions of Eye Tracking based Robotic Arm Movement<br><i>Ebad Zahir, Md. Abir Hossen, Md Abdullah Al Mamun, Yousuf Md Amin, and S.M. Ishfaq</i>  |
|  | 241  | Iterative Extended Spectral Subtraction for Restoration from Image Degraded by White Noise<br><i>Tianyang Zhou, Yosuke Sugiura, and Tetsuya Shimamura</i>   |
|  | 435  | Benefit Evaluation of Salat from Alpha Rhythm of EEG Signal<br><i>Farzana Khanam, and Mohiuddin Ahmad</i>   |
|  | 451  | An Adaptive Background Modeling Based on Modified Running Gaussian Average Method<br><i>Md. Asifur Rahman, Boshir Ahmed, Md. Ali Hossian, and Md. Nazrul Islam Mondal</i>   |
|  | 463  | Feature Mining for Effective Subspace Detection and Classification of Hyperspectral Images<br><i>Md. Ali Hossain, Hasin-E-Jannat, Boshir Ahmed, and Md. Al Mamun</i>  |
|  | 617  | Virtual Eye Doc: An Android Based App in Bengali Language for Eye Health & Vision Examination<br><i>Tasfia Shermi, Muhammad Nazrul Islam, Sadia Akter, Saborni Shernaj Binte Elahi, Wali Mohammad Abdullah, and Khondaker Abdullah Al Mamun</i>                           |
| <b>Session Name:</b> Natural Language Processing<br><b>Venue:</b> Heritage Club (Level-12)<br><b>Session Chair:</b> Prof. Dr. M. M. A. Hashem, KUET, Bangladesh<br><b>Session Co-chair:</b> Dr. Sajjad Waheed, MBSTU, CUET, Bangladesh |  |   |

|                               |  |  |   |
|-------------------------------|--|--|---|
|                               | <b>Day-1<br/>Technical<br/>Session-4</b>   | 119  | Locality-sensitive Hashing scheme for Bangla News Article Clustering using Bloom Filter<br><i>Subrata Nath, Pranab Singha, and Md. Saiful Islam</i>                             |
|                               |  | 227  | Sentiment Analysis of Bengali Comments With Word2Vec and Sentiment Information of Words<br><i>Md. Al- Amin, Md. Saiful Islam, and Shapan Das Uzzal</i>                          |
|                               |  | 252  | A Comprehensive Study on Sentiment of Bengali Text<br><i>Md. Al- Amin, Md. Saiful Islam, and Shapan Das Uzzal</i>   |
|                               |  | 488  | Designing a Bangla Parser using Non-Deterministic Push Down Automata<br><i>Md. Mostafizur Rahman, Md. Abdulla-Al-Sun, K.M. Azharul Hasan, and Mohammad Insanur Rahman Shuvo</i> |
|                               |  | 533  | Statistical Parsing of Bangla Sentences by CYK Algorithm<br><i>Ayesha Khatun, and Mohammed Moshikul Hoque</i>   |
|                               |  | 677  | A Framework for Building a Natural Language Interface for Bangla<br><i>Yeasin Ar Rahman, Mahtabul Alam Sohan, Khalid Ibn Zinnah, and Mohammed Moshikul Hoque</i>                |
|                               | <b>Day-1<br/>Technical<br/>Session-5</b>   | <b>Session Name:</b> Wireless and Sensor Network<br><b>Venue:</b> Conference Room Ramu ( <i>Level-12</i> )<br><b>Session Chair:</b> Prof. Dr. Asaduzzaman, CUET, Bangladesh<br><b>Session Co-chair:</b> Dr. Md Hossam-E-Haider, MIST, Bangladesh |   |
|                               |  | 141  | Optimal Range Estimation for Energy Efficient Dynamic Packet Size<br><i>Iftekharul Mobin, Nabeel Mohammed, and Sifat Momen</i>  |
|                               |  | 264  | A TDMA based EM Controlled Multi-Channel MAC Protocol for Underwater Sensor Networks<br><i>Md. Ibrahim Ibne Alam and Md. Farhad Hossain</i>                                     |
|                               |  | 489  | DURI-MAC: A Dual Channel Receiver Initiated MAC Protocol for Wireless Sensor Network (WSN)<br><i>Md. Ibrahim Khalil, Md. Abir Hossain, and Imtiaz Ahmed</i>                     |
|                               |  | 547  | Service Aware Fuzzy Logic Based Handover Decision in Heterogeneous Wireless Networks<br><i>Mehek-Moutushy Rahman Mou, and Mostafa Zaman Chowdhury</i>                           |
|                               |  | 562  | Near Bore-sight Beam Scanning from Half-Width Microstrip Leaky-Wave Antenna<br><i>Debabrata K. Karmokar, Khaled M. Morshed, Md Mostafizur Rahman, and Md. Nurunnabi Mollah</i>  |
|                               | 613  | Queue Management of RED Enabled ZigBee Network Based on Packet Size Variations and Distribution Techniques<br><i>Md. Jaminul Haque Biddut, Md. Faizul Huq Arif, and Nazrul Islam</i>   |   |
| <b>10:30 am-<br/>11:00 am</b> | <b>Tea Break</b><br><b>Venue:</b> Heritage Club ( <i>Level-12</i> )                  |  |   |
| <b>11:00 am-<br/>12:30 pm</b> | <b>Opening Ceremony</b><br><b>Venue:</b> Conference Hall Sabrang ( <i>Level-02</i> ) |  |   |

|                      |   |   |
|----------------------|---|---|
| 12:30 pm-<br>1:15 pm | <b>Keynote Session- I</b>   |   |
|                      | <b>Venue:</b> Conference Hall Sabrang ( <i>Level-02</i> )   |   |
|                      | <b>Session Chair:</b> Prof. Dr. Anton Nijholt, Imagineering Institute, Iskandar, Malaysia & University of Twente, Enschede, The Netherlands |   |
|                      | <b>Title:</b> 50+ Years of Fuzzy Sets: Machine Intelligence and Data to Knowledge   |   |
|                      | <b>Speaker:</b> Sankar K. Pal, Distinguished Scientist & former Director of Indian Statistical Institute, India                             |   |
| 1:15 pm-<br>2:15 pm  | <b>Prayer and Lunch Break</b>   |   |
| 2:00 pm -<br>3:15 pm | <b>Day-1<br/>Poster<br/>Session-1</b>   | <b>Session Name:</b> Power Systems and Renewable<br><b>Venue:</b> Heritage Club ( <i>Level-12</i> )<br><b>Session Chair:</b> Prof. Dr. Muhammad Quamruzzaman, CUET, Bangladesh<br><b>Session Co-chair:</b> Dr. Mohammad Rubaiyat Tanvir Hossain, CUET, Bangladesh |
|                      |   | 206   Design and Implementation of Remotely Located Energy Meter Monitoring with Load Control and Mobile Billing System through GSM<br><i>Md. Sajedul Islam, and Md. Sadequr Rahman Bhuiyan</i>   |
|                      |   | 281   Frequency Analysis of a ZVS Parallel Quasi Resonant Inverter for a Solar Based Induction Heating System<br><i>Saila Ishrat Annie, Khosru M Salim, Zaima Tasneem, and Mohammad Rejwan Uddin</i>  |
|                      |   | 336   ATP Analysis of Direct Lightning Strike on a Telecommunication Tower Suited over Multistoried Building<br><i>Md. Zoyheroul Islam, and Md. Salah Uddin Yusuf</i>   |
|                      |   | 386   Highly Efficient Ultra Thin Cu(In,Ga)Se <sub>2</sub> Solar cell with Tin Selenide BSF<br><i>E. M. K. Iqbal Ahmed, S. Bhowmik, M. A. Matin, Nowshad Amin</i>   |
|                      |   | 434   Design and Analysis of a Green Energy Technology for Power Generation Using Cow Urine<br><i>Wahidul Hasan, Sajib Chakraborty, M. Abdur Razzak, and K. M. Salim</i>  |
|                      |   | 438   NH <sub>4</sub> Cl Thin Film Fabrication by Close Spaced Sublimation<br><i>Hassanul Azim, Muhammed Abu Saeed Kader, and Mahmud Abdul Matin Bhuiyan</i>  |
|                      |   | 484   Role of Network Reconfiguration in Loss Reduction in Power Generation and Supply System<br><i>Md. Saiful Islam, Md. Sayem Molla Juyel, and Moudud Ahmed</i>   |
|                      |   | 516   Weakest Location Exploration in IEEE-14 Bus System for Voltage Stability Improvement Using STATCOM, Synchronous Condenser and Static Capacitor<br><i>F.B.K. Mahmood, S.Ahmad, G.Mukit, M.T.I. Shuvo, S.Razwan and M.N.I. Maruf, and Fadi M. Albatsh</i>     |
|                      |   | 537   Efficiency Improvement of Amorphous Silicon Single Junction Solar Cell by Design Optimization<br><i>Md. Nazmul Islam Sarkar, and Himangshu Ranjan Ghosh</i>   |

|  |                                       |  |  |
|--|---------------------------------------|--|--|
|  |                                       | 551  | An Electromechanical Approach to Improve the Output Voltage of a DC Wind Turbine in Low Wind Speed Areas<br><i>Md. Didarul Islam, Asif Parvez, and Md. Mizanur Rahman</i>  |
|  |                                       | 575  | Developing Demand Side Management Program for Residential Electricity Consumers of Dhaka City<br><i>Ayman Uddin Mahin, Md. Adnan Sakib, Md. Asif zaman, Md. Shahed chowdhury, and Saik Ahsan Shanto</i>  |
|  |                                       | 621  | Tandem Organic Solar Cells with Improved Efficiency<br><i>Nusrat Karim, Farha Islam Mime, Md. Rafiqul Islam, and Ibrahim Mustafa Mehedi</i>  |
|  |                                       | 623  | Performance Analysis of P3HT:PCBM Based Organic Solar Cell<br><i>Nusrat Karim, Farha Islam Mime, Md. Rafiqul Islam, and Ibrahim Mustafa Mehedi</i>   |
|  |                                       | 678  | Performance Improvement of Highly Stable Molybdenum Telluride Solar Cells with CZT BSF<br><i>Mrinmoy Dey, Maitry Dey, N. K. Das, A. K. S. Gupta, M. A. Matin, and Nowshad Amin</i>   |
|  | <b>Day-1<br/>Poster<br/>Session-2</b> | <b>Session Name:</b> Nanotechnology, Electronics and Control Systems<br><b>Venue:</b> Heritage Club (Level-12)<br><b>Session Chair:</b> Prof. Dr. Quazi Delwar Hossain, CUET, Bangladesh<br><b>Session Co-chair:</b> Dr. Sheikh Md. Rabiul Islam, KUET, Bangladesh |  |
|  |                                       | 156  | Minority Carrier Lifetime Dependence into Switching Power Loss Calculation of IGBT<br><i>Nigar Sultana Bristy, Sharmin Mustary, Rifatul Hasan, and Avijit Das</i>  |
|  |                                       | 193  | Effect of Dielectric Constant and Oxide Thickness on the Performance Analysis of Symmetric Double Gate Stack-Oxide Junctionless Field Effect Transistor in Subthreshold Region<br><i>Chinmoy Nath Saha, Raisa Fabiha, and Md. Shafiqul Islam</i> |
|  |                                       | 195  | Variable Speed PMSM Drive with DC Link Voltage Controller for Light Weight Electric Vehicle<br><i>Ahmed Mortuza Saleque, Alif Md. Asif Khan, Siam Hasan Khan, Erfan Islam, and Md. Nazmul Chowdhury</i>  |
|  |                                       | 274  | Detection and Controlling of Drivers' Visual Focus of Attention<br><i>Partha Pratim Debnath, A. F. M. Rashidul Hasan, and Dipankar Das</i>   |
|  |                                       | 277  | Web-based Automated Appliance Control System with Security and Gas Safety Systems<br><i>Sanita Rahman, Emdadul Haque, Mahmudur Rahman, and Hasan U. Zaman</i>  |
|  |                                       | 323  | Modified Architecture of Multilayer Graphene as Highly Efficient Heat Spreader<br><i>M. A. A. Azmain, Milton Kumar Kundu, Tushar Sarkar, and M. A. G. Khan</i>   |
|  |                                       | 394  | Performance Analysis of Bidirectional Split-Pi Converter Integrated with Passive Ripple Cancelling Circuit<br><i>Tanvir Ahmad, and Sharmin Sobhan</i>  |
|  |                                       | 440  | A Quasi-Elliptic Low Pass Filter Based on Complementary Split Ring Resonator With Sharp Selectivity and Wide Stopband<br><i>Shakhawat Parvez, Nazmus Sakib, and Md. Nurunnabi Mollah</i>   |
|  |                                       | 453  | Hybrid Neural Network for Efficient Training<br><i>Md. Billal Hossain, Sayeed Islam, Noor-e-Hafsa Zhumur, Najmoon Nahar Khanam, Md. Imran Khan, and Md. Ahasan Kabir</i>   |

|  |                                       |   |  |
|--|---------------------------------------|---|--|
|  |                                       | 532   | A Theoretical Model for Determination of Optimum Metal Thickness in Kretschmann Configuration Based Surface Plasmon Resonance Biosensors<br><i>Syed Mohammad Ashab Uddin, Sayeed Shafayet Chowdhury, and Ehsan Kabir</i>                             |
|  |                                       | 534   | Detection of DNA Mutation, Urinary Diseases and Blood Diseases using Surface Plasmon Resonance Biosensors Based on Kretschmann Configuration<br><i>Sayeed Shafayet Chowdhury, Syed Mohammad Ashab Uddin, Ehsan Kabir, and A. M. Mahmud Chowdhury</i> |
|  |                                       | 558   | Design and Analysis of 3 Stage Ring Oscillator Based on MOS Capacitance for Wireless Applications<br><i>Rafiul Islam, Ahmad Nafis Khan Suprotik, S. M. Zia Uddin, and Md. Tawfiq Amin</i>  |
|  |                                       | 576   | Multiple Motion Control System of Robotic Car Based on IoT to Produce Cloud Service<br><i>Maliha Rahman Mishi, Rabeya Bibi, and Tanveer Ahsan</i>  |
|  |                                       | 639   | Interactive Generalized Keyboard Driver for Bengali Braille Embosser<br><i>Kishalay Dhar, M. Ashifur Rahman, and M. Ahsan Ullah</i>  |
|  |                                       | 650   | Automated Anti-Collision System for Automobiles<br><i>Tasneem Sanjana, Kazi Ahmed Asif Fuad, Mehrab Masayeed Habib, and Ahmed Amin Rumel</i>   |
|  |                                       | 665   | A Novel Quasi-Lumped UWB High Pass Filter With Multiple Transmission Zeros<br><i>Shakhawat Parvez, Nazmus Sakib, and Md. Nurunnabi Mollah</i>  |
|  | <b>Day-1<br/>Poster<br/>Session-3</b> | <b>Session Name:</b> Communication, Networks and Security-I<br><b>Venue:</b> Heritage Club ( <i>Level-12</i> )<br><b>Session Chair:</b> Prof. Dr. Muhammad Ahsan Ullah, CUET, Bangladesh<br><b>Sessoin Co-Chair:</b> Dr. Md. Mokammel Haque, CUET, Bangladesh |  |
|  |                                       | 131   | Underwater Vehicle Communication Using Electromagnetic Fields in Shallow Seas<br><i>Manik Dautta, and Md. Imrul Hasan</i>  |
|  |                                       | 142   | A Novel Low Loss Porous-Core Photonic Crystal Fiber for Terahertz Wave Transmission<br><i>Md. Ahasan Habib, and Md. Shamim Anower</i>  |
|  |                                       | 396   | Satellite Image Compression Using Integer Wavelet Regression<br><i>Md. Al Mamun, Md. Ali Hossain, Md. Nazrul Islam Mondal, and Mumu Aktar</i>  |
|  |                                       | 399   | Hexagonal Shaped Core Dodecagonal PCF with High Birefringence and Nonlinear Coefficient<br><i>Md. Mamunur Rashid1, Md. Shamim Anower, Md. Rabiul Hasan, and Nuzat Tabassum</i>   |
|  |                                       | 425   | Multi Antenna Based Cooperative Coarse Fine Sensing for Wideband Cognitive Radio System<br><i>Mohammad Tahidul Islam, and Md. Adil Mahmud Roman</i>  |
|  |                                       | 491   | Estimation of Rain Attenuation at EHF bands for Earth-to-Satellite Links in Bangladesh<br><i>Md. Sakir Hossain, and Md. Atiqul Islam</i>   |
|  |                                       | 499   | A Hierarchical Key Derivative Symmetric Key Algorithm using Digital Logic<br><i>Chitra Biswas, Udayan Das Gupta, and Md. Mokammel Haque</i>  |
|  |                                       | 509   | A Simple Multiband Patch Antenna for Application in Wireless Communication<br><i>Md. Imran Khan, Md. Ahasan Kabir, and Avijit Hira</i>   |

|                       |   |     |   |
|-----------------------|---|-----|---|
|                       |   | 510 | Specific Absorption Rate (SAR) Analysis Using Plastic Substrate Based Negative Indexed Metamaterial Shielding<br><i>T. Alam1, M. S. Alam, M. R. Islam, M. T. Islam, M. A. Ullah, F. Ashraf, and M. R. I. Faruque</i>                        |
|                       |   | 530 | Inversion of Symmetric Matrices Using Unsymmetrical Fault Analysis<br>Sayeed Shafayet Chowdhury, Md. Billal Hossain, and Syed Mohammad Ashab Uddin  |
|                       |   | 566 | Prediction of Burn Incidents Due to Faulty Installations in RMG Factories in Bangladesh<br><i>Farhina Haque, Hla-U-May Marma, and A. H. Chowdhury</i>   |
|                       |   | 610 | Mathematical Characterization of Coupled Pi-shaped DNG Metamaterial Structure<br><i>F. Ashraf, M. A. Ullah, M. S. Alam, M. R. Islam, T. Alam, M. T. Islam, and R. Azim</i>  |
|                       |   | 626 | Estimation of Link Range and Bit Rate for 16 Channel WDM-FSO Considering Atmospheric Turbulence and Pointing Error Under Various Weather Conditions<br><i>Sujon Kumar Biswas, Pankaj Biswas, Jobaida Akhtar, and Mohammad Istiaque Reja</i> |
| 2:30 pm –<br>3:10 pm  | <b>Invited Session- I</b>   |     |   |
|                       | <b>Venue:</b> Conference Hall Sabrang ( <i>Level-02</i> )   |     |   |
|                       | <b>Session Chair:</b> Prof. Dr. Shaikh Anowarul Fattah, BUET, Bangladesh  |     |   |
|                       | <b>Title:</b> A Four Dimensional Computational Model of the Dividing Human Cells  |     |   |
|                       | <b>Speaker:</b> M. Julius Hossain, European Molecular Biology Laboratory (EMBL), Germany                                    |     |   |
| 03:15 pm-<br>04:00 pm | <b>Keynote Session- II</b>  |     |   |
|                       | <b>Venue:</b> Conference Hall Sabrang ( <i>Level-02</i> )   |     |   |
|                       | <b>Session Chair:</b> Dr. Nazmul Siddique, Intelligent Systems Research Centre, Ulster University, United Kingdom           |     |   |
|                       | <b>Title:</b> Digital Humor Generation in Smart Environments and Playable Cities  |     |   |
|                       | <b>Speaker:</b> Anton Nijholt, Imagineering Institute, Iskandar, Malaysia & University of Twente, Enschede, The Netherlands |     |   |
| 4:00 pm –<br>4:30 pm  | <b>Tea Break</b><br><b>Venue:</b> Heritage Club ( <i>Level-12</i> )   |     |   |

|                     |  |  |   |
|---------------------|--|--|---|
| 4:30 pm-<br>6:00 pm | <b>Day-1<br/>Technical<br/>Session-6</b> | <b>Session Name:</b> Electronic Devices and Optoelectronics<br><b>Venue:</b> Conference Room Kaptai ( <i>Level-03</i> )<br><b>Session Chair:</b> Prof. Dr. Mohiuddin Ahmad, KUET, Bangladesh<br><b>Session Co-chair:</b> Mr. A. H. M. Ashfaq Habib, CUET, Bangladesh |   |
|                     |  | 122  | Linear Asymmetric Pocket Profile Based Pinch-Off Voltage Model for Nano Scale n-MOSFET<br><i>Muhibul Haque Bhuyan, and Quazi Deen Mohd Khosru</i>   |
|                     |  | 149  | Ultra-High Birefringent and High Non-Linear PCF for S+C+L+U Wavebands<br><i>Shabbir Chowdhury, and Jagodananda Mondal</i>   |
|                     |  | 171  | Design of a Nearly Zero Ultra-Flattened Dispersion Shifted Fiber with High Birefringence and High Non-Linearity<br><i>Shabbir Chowdhury, and Saikat Kushary</i>   |
|                     |  | 189  | Control Message Scheduling Algorithm for Improving Throughput and Jitter Performance of The MHSSR DBA Scheme of PON<br><i>Mohammad Mahbubur Rahman, Monir Hossen, and Rehnuma Bushra</i>  |
|                     |  | 269  | Thread Guaranteed Algorithm for Real Time Traffic in Multi-Threaded Polling of PON-based Open Access Network<br><i>Monir Hossen, and Shuvashis Saha</i>   |
|                     |  | 385  | A Low-Power Low-Offset Three Stage Single Ended Op Amp With Nested Miller Compensation<br><i>A. M. Jahirul Islam, Parash Chakma, Md. Shibli Farhan, Kazi Tajmul Islam, Abdur Rahman, and Golam R. Rahat</i>   |
|                     | <b>Day-1<br/>Technical<br/>Session-7</b> | <b>Session Name:</b> Material Processing for Photo Voltaic Cell and Nano Technology<br><b>Venue:</b> Conference Hall Sabrang ( <i>Level-02</i> )<br><b>Session Chair:</b> Prof. Dr. Faruque-Uz-Zaman Chowdhury, CUET, Bangladesh                                     |   |
|                     |  | 138  | Effect of Varying the Row and Column Size of Periodic Arrays of Plasmonic Nanoparticles on the Energy Conversion Efficiency of Thin-film Solar Cells<br><i>Saniat Ahmed Choudhury, Md. Shirazim Munir, Nuzhat Nawshin and Mustafa Habib Chowdhury</i> |
|                     |  | 167  | A Heuristic Proposition of Efficient Copper-Electrodeposited p-type Thin Film for CZTS Solar Cell<br><i>Tazdik Patwary Plateau, and Md. Majidul Haque Bhuiyan</i>   |
|                     |  | 173  | Numerical Analysis of Stacked Layered CZTS and CZTSe-Based Thin Film Solar Cell<br><i>Mohammad Wahidur Rahman, Saad Mohammad Abdullah, Mohammed Akhyar Bakth, and Quazi Nafees Ul Islam</i>   |
|                     |  | 219  | Improvement of Photo-Current Density of P3HT:PCBM Bulk Heterojunction Organic Solar Cell Using Periodic Nanostructures<br><i>Faysal Hakim, and Md. Kawsar Alam</i>  |
|                     |  | 325  | Thermal Conduction in Graphene Thin Films Considering Different Materials of Various Shapes<br><i>Tushar Sarkar, Milton Kumar Kundu, M. A. A. Azmain, and M. A. G. Khan</i>   |



|   |   |   |
|---|---|---|
| <b>Day-1<br/>Technical<br/>Session-8</b>  | <b>Session Name:</b> Signal Processing<br><b>Venue:</b> Conference Room Himchori ( <i>Level-02</i> )<br><b>Session Chair:</b> Prof. Dr. Shaikh Anowarul Fattah, BUET, Bangladesh<br><b>Session Co-chair:</b> Dr. Mohammed Nasir Uddin, Jagannath university, Bangladesh |   |
|   | 242   | Fundamental Frequency Estimation Combining Air-conducted Speech with Bone-Conducted Speech in Noisy Environment<br><i>Shiming Zhang, Yosuke Sugiura, Tetsuya Shimamura, and Hisanori Makinaey</i>   |
|   | 539   | Pseudo Random Binary Sequence: A New Approach over Finite Field and Its Properties<br><i>Fatema Akhter, and Md. Selim Al Mamun</i>  |
|   | 591   | Design and Implementation of Low Cost ECG Monitoring System for the Patient using Smart Device<br><i>Sudip Deb, Sheikh Md. Rabiul Islam, Jannatul Robaiat Mou, and Md. Tariqul Islam</i>            |
|   | 653   | Text Dependent and Independent Speaker Recognition Using Neural Responses from the Model of the Auditory System<br><i>Shoumya Chowdhury, Nursadul Mamun, Ainul Anam Shahjamal Khan, Fahim Ahmed</i> |
|   | 663   | Chebyshev Quarter Wavelength Wideband Bandstop Filter Based on Dumbbell Annular Ring Resonator<br><i>Shakhawat Parvez, Nazmus Sakib, and Md. Nurunnabi Mollah</i>                                   |
|   | 675   | ECG Signal for Atrial Fibrillation Detection<br><i>Fatema Tuj Johura, Sheikh Md. Rabiul Islam, Md. Maniruzzaman, and Mahdi Hasan</i>  |
| <b>Day-1<br/>Technical<br/>Session-9</b>  | <b>Session Name:</b> Data Mining and Cloud Computing<br><b>Venue:</b> Heritage Club ( <i>Level-12</i> )<br><b>Session Chair:</b> Prof. Dr. K. M. Azharul Hasan, KUET, Bangladesh<br><b>Session Co-chair:</b> Dr. Muhammad Nazrul Islam, MIST, Bangladesh                |   |
|   | 159   | Carbon Emission Measurement In Improved Cook Stove Using Data Mining<br><i>Md. Sajidur Rahman, and Sajjad Waheed</i>  |
|   | 285   | Rice Yield Prediction Model Using Data Mining<br><i>Umid Kumar Dey, Abdullah Hasan Masud, and Mohammed Nazim Uddin</i>  |
|   | 304   | Secured Cloud Computing Service: A Case Study of Large Scale Lyapunov Equation<br><i>Jannatul Ferdush, and M. M. A. Hashem</i>  |
|   | 342   | A Gaussian Mixture Based Boosted Classification Scheme For Imbalanced And Oversampled Data<br><i>Biprodip Pal, and Mahit Kumar Paul</i>   |
|   | 376   | APSD: A Framework for Automated Processing of Survey Documents<br><i>Farzana Yasmin, Syed Mohammad Minhaz Hossain, and Mohammad Shamsul Arefin</i>  |
| <b>Day-1<br/>Technical<br/>Session-10</b> | <b>Session Name:</b> Cryptography and Data Compression<br><b>Venue:</b> Conference Room Ramu ( <i>Level-12</i> )<br><b>Session Chair:</b> Dr. Md. Atiqur Rahman Ahad, DU, Bangladesh<br><b>Session Co-Chair:</b> Dr. Pranab Kumar Dhar, CUET, Bangladesh                |   |

|  |  |     |   |
|--|--|-----|---|
|  |  | 178 | SVD Based Audio Watermarking Using Angle-Quantization<br><i>Masato Ogura, Yosuke Sugiura, and Tetsuya Shimamura</i>   |
|  |  | 187 | Performance Analysis of Modes of Operations in Cryptography using AES Algorithm<br><i>Mahmoud Alfadel, Khaleque Md Aashiq Kamal, and Munawara Saiyara Munia</i>               |
|  |  | 232 | Experimental Analysis of Data Mining Application for Intrusion Detection with Feature Reduction<br><i>Nazmul Shahadat, Imam Hossain, Anisur Rohman, and Nawshi Matin</i>      |
|  |  | 237 | Predicting Higher Secondary Results by Data Mining Algorithms with VBR: A feature Reduction Method<br><i>Nazmul Shahadat, Sakil Ahmed, Bushra Rahman, and Musfiqur Rahman</i> |
|  |  | 555 | Edge-based Transformation and Entropy Coding for Lossless Image Compression<br><i>Md. Ahasan Kabir, and M. Rubaiyat Hossain Mondal</i>  |
|  |  | 640 | Bangla Text Compression Based on Modified Lempel-Ziv-Welch Algorithm<br><i>Linkon Barua1, Pranab Kumar Dhar, Lamia Alam, and Isao Echizen</i>                                 |
|  |  | 657 | A Semi-Fragile Watermarking Method Using Slant Transform and LU Decomposition for Image Authentication<br><i>Imran Sikder, Pranab Kumar Dhar, and Tetsuya Shimamura</i>       |

## Day 2: February 17, 2017

**8:00 am –  
9:00 am**

### Registration and Kit Collection

|                              |  |  |   |
|------------------------------|--|--|---|
| <b>9:00 am-<br/>10:30 am</b> | <b>Day-2<br/>Technical<br/>Session-1</b> | <b>Session Name:</b> Radio Frequency and Antenna Engineering<br><b>Venue:</b> Conference Room Himchori ( <i>Level-02</i> )<br><b>Session Chair:</b> Dr. Sheikh Md. Rabiul Islam, KUET, Bangladesh<br><b>Session Co-Chair:</b> Dr. Md. Azad Hossain, CUET, Bangladesh |   |
|                              |  | 160  | A Compact Low-profile Ultra Wideband Antenna for Biomedical Applications<br><i>Foez Ahmed, Nisab Hasan, and Md. Halim Miah Chowdhury</i>  |
|                              |  | 222  | Design and Performance Analysis of A Microstrip Line-fed On-body Matched Flexible UWB Antenna for Biomedical Applications<br><i>Akash Biswas, Akib Jayed Islam, Abdullah Al-Faruk, and Sadman Shahriar Alam</i>                                       |
|                              |  | 414  | Effective Medium Ratio Obeying Multiple Octagonal Split-Ring Resonators Based Metamaterial for Tri-Band Applications<br><i>Mohammad Jakir Hossain, Mohammad Rashed Iqbal Faruque, Md. Iqbal Hossain, Mohammad Tariqul Islam, and Sabirin Abdullah</i> |
|                              |  | 424  | Plasmonic Resonances in Hexagonal Split-Ring Resonator<br><i>Hasibul Hasan, and Mirza Fuad Adnan</i>  |
|                              |  | 443  | A Combined Double H-shaped Microstrip Patch Antenna for X-Band operation<br><i>Md. Jubaer Alam, Mohammad Rashed Iqbal Faruque, Md. Iqbal Hossain, Mohammad Tariqul Islam, and Sabirin Abdullah</i>  |

|  |  |   |   |
|--|--|---|---|
|  |  | 568   | Effect of Human Body on an 800 MHz Inset Fed Rectangular Microstrip Patch Antenna Characteristics<br><i>Md. Mamun Ur Rashid, Liton Chandra Paul, Amal Bouazizi, Rikta SenI, Bijoy Podder, and Ajay Krishno Sarkar</i> |
| <b>Day-2<br/>Technical<br/>Session-2</b> | <b>Session Name:</b> Communication System<br><b>Venue:</b> Conference Hall Sabrang (Level-02)<br><b>Session Chair:</b> Prof. Dr. Satya Prasad Majumder, BUET, Bangladesh<br><b>Session Co-Chair:</b> Prof. Dr. Md. Ahsan Ullah, CUET, Bangladesh |   |   |
|  | 163  | A Multiband MIMO Antenna for Future Generation Handset Applications<br><i>Foez Ahmed, Md. Halim Miah Chowdhury, and Aurangzib Md. Abdur Rahman</i>  |   |
|  | 432  | A Low Cost Remotely Operated Vehicle for Underwater Surveillance-A Complete Experimental Platform<br><i>Nazmul Hasan, Md. Syadus Sefat, and Md. Shahjahan</i>   |   |
|  | 504  | Performance Evaluation of GNSS Receiver in Multi-constellation System<br><i>Musharrat Shabnam, Imtiaz Hasan Chowdhury, Zahid Hassan Tushar, Sunjida Sultana, and Md Hossam-E-Haider</i>   |   |
|  | 659  | A Novel UWB Wearable Icon-Type Textile Antenna for Body Area Network Applications<br><i>Kawshik Shikder and, Farhadur Arifin</i>  |   |
|  | 669  | Mobility Effect on the Downlink Performance of Spatial Multiplexing Techniques under Different Scheduling Algorithms in Heterogeneous Network<br><i>Abdullah Bin Shams, Syed Rafiee Abied, Md. Asaduzzaman and Md. Farhad Hossain</i> |   |
| <b>Day-2<br/>Technical<br/>Session-3</b> | <b>Session Name:</b> Intelligent Systems<br><b>Venue:</b> Heritage Club (Level-12)<br><b>Session Chair:</b> Prof. Dr. Dipankar Das, RU, Bangladesh<br><b>Session Co-Chair:</b> Prof. Dr. Taufique Sayeed, Premier University, Bangladesh         |   |   |
|  | 203  | Design of Low Power Decimal Logarithmic Converter<br><i>Riaz-ul-Haque Mian and Md. Liakot Ali</i>   |   |
|  | 272  | Evaluating the Connectivity of Motor Area with Prefrontal Cortex by fNIR Spectroscopy<br><i>Md. Asadur Rahman, and Mohiuddin Ahmad</i>  |   |
|  | 288  | Indoor localization System for Assisting Visually Impaired People<br><i>Md. Mazidul Alam, Sayed Erfan Arefin, Miraj Al Alim, Samiul Islam Adib, Md. Abdur Rahman</i>  |   |
|  | 397  | Codon Based Back Propagation Neural Network Approach to Classify Hypertension Gene Sequences<br><i>Sabina Zaman, and Rizoan Toufiq</i>  |   |
|  | 498  | Bangladeshi Road Sign Recognition Based on DtBs Vector and Artificial Neural Network<br><i>Soumen Chakraborty, Mohammed Nasir Uddin, and Kaushik Deb</i>  |   |

|  |  |  |  |
|--|--|--|--|
|  |  | 522  | Wheel Therapy Chair: A smart system for disabled person with therapy facility<br><i>Md. Mamunur Rahman, Swarup Chakraborty, Avradip Paul, Ali Mohammed Jobayer, and Md. Azad Hossain</i>                           |
|  |  | 616  | A Low Cost Automated Fluid Control Device using Smart Phone for Medical Application<br><i>Humayun Rashid, Sarjahan Shekha, S M Taslim Reza , Iftekhar Uddin Ahmed, Qader Newaz, and Md. Rasheduzzaman</i>          |
| <b>Day-2<br/>Technical<br/>Session-4</b> | <b>Session Name:</b> Power System Analysis<br><b>Venue:</b> Conference Room Ramu (Level-12)<br><b>Session Chair:</b> Prof. Dr. Md. Shamim Anower, RUET, Bangladesh<br><b>Session Co-Chair:</b> Prof. Dr. Md. Ahsan Ullah, CUET, Bangladesh |  |  |
|  |  | 240  | Power Grid Connectivity Monitoring by Identifying Critical Transmission Lines Based on Network Flow<br><i>A. B. M. Shakeruzzaman, Most. Nahida Akter, and A. B. M. Nasiruzzaman</i>                                |
|  |  | 328  | Power Quality Improvement by using Shunt Hybrid Active Power Filter<br><i>Rashik Tahmid, and Shameem Ahmad</i>   |
|  |  | 526  | Nonlinear Adaptive Backstepping Controller Design for Grid Currents Regulation of a CSI Based PV System with External Disturbances<br><i>T. K. Roy, L. C. Paul, M. I. Sarkar, M. F. Pervej, and F. K. Tumpa</i>    |
|  |  | 545  | S-Transform and Mahalanobis Distance Based Approach for Classifying Power Quality Disturbances<br><i>Md. Jashim Uddin Bhuiyan, Most. Tasneem Ara Begum, and Dr. M. R. Alam</i>                                     |
|  |  | 549  | A Simplistic Mathematical Approach for Detection and Classification of Power Quality Events<br><i>N. R. Nashad, M. J. Islam, S. Alam, R. M. Rahat, student member, IEEE, Most. T. A. Begum, and Dr. M. R. Alam</i> |
|  |  | 552  | A New Approach to Develop a Template Based Load Model that can Dynamically Adopt different types of Non-linear Loads<br><i>S M Salam, M J Uddin, and Saif Hannan</i>   |
|  | <b>10:30 am-<br/>10:45 am</b>  | <b>Tea Break</b><br><br><b>Venue:</b> Heritage Club (Level-12) |  |
| <b>10:45 am-<br/>11:20 pm</b>            | <b>Keynote Session- III</b><br><b>Venue:</b> Conference Hall Sabrang (Level-02)<br><b>Session Chair:</b> Prof. Dr. Mohammad Rafiqul Alam, CUET, Bangladesh   |  |  |
|  | <b>Title:</b> Power Electronics Applications in Renewable Energy   |  |  |
|  | <b>Speaker:</b> Muhammad H. Rashid, Florida Polytechnic University, Fellow IET (UK), Life Fellow IEEE (USA), Electrical Engineering, IST-2015, 4700 Research Way Lakeland, FL 33805-8531, USA  |  |  |

|  |  |  |
|--|--|--|
| 11:25 am<br>-12:00 pm  | <b>Keynote Session- IV</b>   |  |
|  | <b>Venue:</b> Conference Hall Sabrang ( <i>Level-02</i> )<br><b>Session Chair:</b> Prof. Dr. Kaushik Deb, CUET, Bangladesh |  |
|  | <b>Title:</b> Recent Progress for Noise-Robust Speech Analysis   |  |
| <b>Speaker:</b> Tetsuya Shimamura, Graduate School of Science and Engineering, Information Technology Center Saitama University, Japan |  |  |
| 12:00 pm-<br>01:00 pm  | <b>Day-2<br/>Technical<br/>Session-5</b>   | <b>Session Name:</b> Robotics and Drives<br><b>Venue:</b> Conference Hall Sabrang ( <i>Level-02</i> )<br><b>Session Chair:</b> Prof. Dr. Mohammad Tariqul Islam, UKM, Malaysia<br><b>Session Co-Chair:</b> Prof. Dr. Mohammed Moshui Hoque, CUET, Bangladesh |
|  |  | 153   Nonlinear Adaptive Backstepping Controller Design for Trajectory Flight Control of UAHs<br><i>T. K. Roy, L. C. Paul, M. F. Pervej, M. I. Sarkar, and F. K. Tumpa</i>   |
|  |  | 170   Adaptive Controller Design for Speed Control of DC Motors Driven by a DC-DC Buck Converter<br><i>T. K. Roy, L. C. Paul, M. I. Sarkar, M. F. Pervej, and F. K. Tumpa</i>  |
|  |  | 581   New Three Phase Bidirectional Switch Based AC Voltage Controller Topologies<br><i>Mohammad Rubaiyat Tanvir Hossain, and Mohammad Ali Choudhury</i>   |
|  |  | 589   True Three-Phase Bidirectional Switch Based Buck AC Voltage Controller Topology<br><i>Mohammad Rubaiyat Tanvir Hossain, Md. Faisal, and Mohammad Ali Choudhury</i>   |
|  | <b>Day-2<br/>Technical<br/>Session-6</b>   | <b>Session Name:</b> Photo Voltaic Cell<br><b>Venue:</b> Conference Room Himchori ( <i>Level-02</i> )<br><b>Session Chair:</b> Prof. Dr. Mahmud Abdul Matin Bhuiyan, CUET, Bangladesh  |
|  |  | 117   Nonlinear Robust Controller Design for a Grid-Connected PV System Using DPC Approach<br><i>T. K. Roy, M. F. Pervej, M. I. Sarkar, and F. K. Tumpa</i>  |
|  |  | 383   Behavior of a Physics Based p-i-n Perovskite Solar Cell by Varying Different Cell Parameters<br><i>Syed Nazmus Sakib, Shananda Rahman and Sanjida Parvin</i>   |
|  |  | 671   Numerical Modeling of SnS Ultra-Thin Solar Cells<br><i>Mrinmoy Dey, Maitry Dey, N. Rahman, I. Tasnim, R. Chakma, U. Aimon, M. A. Matin, and N. Amin</i>  |
|  |  | 682   Design of Ultra-Thin CZTS Solar Cells with Indium Selenide as Buffer Layer<br><i>Mrinmoy Dey, Maitry Dey, Samina Alam, A. K. S. Gupta, N. K. Das, M. A. Matin<sup>2</sup> and N. Amin</i>  |

|                              |  |   |   |
|------------------------------|--|---|---|
|                              |  |   |   |
|                              | <b>Day-2<br/>Technical<br/>Session-7</b> | <b>Session Name:</b> Algorithms<br><b>Venue:</b> Heritage Club ( <i>Level-12</i> )<br><b>Session Chair:</b> Prof. Dr. Md. Nazrul Islam Mondal, RUET, Bangladesh<br><b>Session Co-Chair:</b> Dr. Mohammad Sanauallah Chowdhury, CU, Bangladesh |   |
|                              |  | 319   | Self-Adaptive Hybrid Model between Artificial Bee Colony Algorithm and Differential Evolution for Function Optimization Problem<br><i>Faria Alam, Hossain Shaikh Saadi, and Mohammad Shafiul Alam</i> |
|                              |  | 614   | Q-MAC: QoS and Mobility Aware Optimal Resource Allocation for Dynamic Application Offloading in Mobile Cloud Computing<br><i>Mahinur Akter, Fatema Tuz Zohra, and Amit Kumar Das</i>                  |
|                              |  | 674   | A New Approach of Noise Elimination Methodology for ECG Signal<br><i>Jannatul Robaiat Mou, Sheikh Md. Rabiul Islam, Xu Huang, and Keng Liang Ou</i>   |
|                              |  | 687   | Developing a Framework for Fruits Detection from Images<br><i>Md. Shaddam Hossen, Mohammad Shamsul Arefin, and Rezaul Karim</i>   |
|                              | <b>Day-2<br/>Technical<br/>Session-8</b> | <b>Session Name:</b> Control Systems<br><b>Venue:</b> Conference Room Ramu ( <i>Level-12</i> )<br><b>Session Chair:</b> Prof. Dr. Md. Shahjahan, KUET, Bangladesh<br><b>Session Co-chair:</b> Dr. Monir Hossain, KUET, Bangladesh             |   |
|                              |  | 220   | Auto Landing Sequence for an Unmanned Aerial Vehicle at a Fixed Point<br><i>Md. Shariar Imroze Khan, Mubashera Belal Tiasha, and Shuvrodeb Barman</i>   |
|                              |  | 413   | Analysing Efficiency of DC-DC Converters Joined to PV System Run by Intelligent Controller<br><i>Deepak Kumar Chy, Md. Khaliluzzaman, and Rezaul Karim</i>  |
|                              |  | 590   | Design and Implementation of a Drawbot Using Matlab and Ardiuno Mega<br><i>Mohammed Saifuddin Munna, Bijoy Kumar Tarafder, Md. Golam Robbani, and Tuton Chandra Mallick</i>                           |
|                              |  | 600   | Design and Implementation of a Lightweight Telepresence Robot For Medical Assistance<br><i>Md. Rakin Sarder, Feroz Ahmed, and Bayzid Ahmed Shakhar</i>  |
| <b>1:00 pm –<br/>2:30 pm</b> | <b>Prayer and Lunch Break</b>            |   |   |
| <b>2:30 pm -<br/>3:45 pm</b> | <b>Day-2<br/>Poster<br/>Session-1</b>    | <b>Session Name:</b> Algorithms, Software and Middleware<br><b>Venue:</b> Heritage Club ( <i>Level-12</i> )<br><b>Session Chair:</b> Dr. Rubayet Yasmin, RU, Bangladesh<br><b>Session Co-Chair:</b> Dr. Md. Ali Hossain, RUET, Bangladesh     |   |
|                              |  | 121   | Fuzzy Logic Based Task Allocation in Ant Colonies Under Grid Computing<br><i>Md. Rashedul Islam, and Md.Nasim Akhtar</i>  |

|  |                                       |   |   |
|--|---------------------------------------|---|---|
|  |                                       | 207   | An Empirical Framework for Parsing Bangla Imperative, Optative and Exclamatory Sentences<br><i>Tanzina Alamgir, and Mohammed Safayet Arefin</i>   |
|  |                                       | 229   | A Support Vector Machine mixed with TF-IDF Algorithm to Categorize Bengali Document<br><i>Md. Saiful Islam, Fazla Elahi Md Jubayer, and Syed Ikhtiar Ahmed</i>  |
|  |                                       | 230   | Structure preserving model order reduction using the projection onto the dominant Eigen-space of the Gramian (PDEG)<br><i>M. Monir Uddin</i>  |
|  |                                       | 235   | Dropout Effect On Probabilistic Neural Network<br><i>Nazmul Shahadat, Bushra Rahman, Faisal Ahmed, and Ferdows Anwar</i>  |
|  |                                       | 340   | An Expert Clinical Decision Support System to Predict Disease Using Classification Techniques<br><i>Emrana Kabir Hashi, Md. Shahid Uz Zaman, and Md. Rokibul Hasan</i>                                |
|  |                                       | 410   | Analysis and Prediction of Real Museum Visitors' Interests and Preferences Based on Their Behaviors<br><i>Md. Golam Rashed, Dipankar Das, Yoshinori Kobayashi, and Yoshinori Kuno</i>                 |
|  |                                       | 419   | An Efficient 6 Bit Encoding Scheme for Printable Characters by Table Look Up<br><i>Ashiq Mahmood, Tarique latif, and K.M. Azharul Hasan</i>   |
|  |                                       | 483   | P2P VIDEO CONFERENCING SYSTEM BASED ON WebRTC<br><i>Khalid Ibn Zinnah Apu, Nafiz Mahmud, Firoz Hasan, and Sabbir Hossain Sagar</i>  |
|  |                                       | 536   | Brain Controlled Assistive Buzzer System For Physically Impaired People<br><i>A. M. Mahmud Chowdhury, Faisal Bin Kashem, Alamgir Hossan, and Md. Mehedi Hasan</i>                                     |
|  |                                       | 624   | Cognitive Complexity:A Model for Distributing Equivalent Programming Problems<br><i>Samrat Kumar Dey, S. S. M. Tariq, Md. Shariful Islam, and Golam Md. Muradul Bashir</i>                            |
|  |                                       | 641   | Performance Analysis of Classifying localization Sites of Protein using Data Mining Techniques and Artificial Neural Network<br><i>Md. Shahriare Satu, Tania Akter and Md. Jamal Uddin</i>            |
|  | <b>Day-2<br/>Poster<br/>Session-2</b> | <b>Session Name:</b> Intelligent Computing and Systems<br><b>Venue:</b> Heritage Club ( <i>Level-12</i> )<br><b>Session Chair:</b> Prof. Dr. Md. Nasim Akhtar, DUET, Bangladesh<br><b>Session Co-Chair:</b> Dr. A. F. M. Rashidul Hasan, RU, Bangladesh |   |
|  |                                       | 108   | Weighted Score Level Fusion of Iris and Face to Identify an Individual<br><i>Abdul Matin, Firoz Mahmud, Tanvir Ahmed, and Md Sabbir Ejaz</i>  |
|  |                                       | 130   | Smart Intelligent Electric Vehicle<br><i>Md. Ibnul Bin Kader Arnub and S.M. Asif Uddin</i>  |
|  |                                       | 238   | Classification of Tumors and It Stages in Brain MRI Using Support Vector Machine and Artificial Neural Network<br><i>Rasel Ahmmed, Anirban Sen Swakshar, Md. Foaisal Hossain, and Md. Abdur Rafiq</i> |
|  |                                       | 247   | Bangla Optical Character Recognition through Segmentation using Curvature Distance and Multilayer Perceptron Algorithm<br><i>Shyla Afroge and Boshir Ahmed, Ali Hossain</i>                           |
|  |                                       | 249   | Design and Implementation of Real Time Transformer Health Monitoring System Using GSM Technology<br><i>Sajidur Rahman, Shimanta Kumar Dey, Bikash Kumar Bhawmick and Nipu Kumar Das</i>               |

|  |                                       |   |  |
|--|---------------------------------------|---|--|
|  |                                       | 268   | Development of a polarimetric & interferometric GB-SAR and perform measurement for a fixed target<br><i>Mohammed Faisal, M. A. H. Chowdhury, M. A. I. Bhuyan., N. H. M Bhuyan and Abdul Matin</i>              |
|  |                                       | 275   | Epileptic Seizure Classification using Statistical Features of EEG Signal<br><i>Md. Mamun or Rashid and Mohiuddin Ahmad</i>  |
|  |                                       | 287   | Probing the Neuronal Status for Cerebrovascular Disease using EEG<br><i>G. M. Mahmudur Rahman, H. Okazawa, Md. Sherajul Islam, Md. Shahjahan and S. S. Zakir</i>   |
|  |                                       | 308   | Designing a Sign Language Translation System using Kinect Motion Sensor Device<br><i>ShihabShahriarHazari, Asaduzzaman, Lamia Alam and Nasim Al Goni</i>   |
|  |                                       | 442   | RPPMD (Randomly Projected Possible Motif Discovery): An Efficient Bucketing Method for Finding DNA Planted Motif<br><i>Faisal Bin Ashraf, Ali Imam Abir, Md Sirajus Salekin and M. A. Mottalib</i>             |
|  |                                       | 447   | Traffic Sign Detection and Recognition Using Fuzzy Segmentation Approach and Artificial Neural Network Classifier Respectively<br><i>Zainal Abedin, Prashengit Dhar, Muhammad Kamal Hossen and Kaushik Deb</i> |
|  |                                       | 465   | Effective Subspace Detection based on Cross Cumulative Residual Entropy for Hyperspectral Image Classification<br><i>Md. Ali Hossain, Boshir Ahmed, Suhrid Shakhar Ghosh and Md. Nazrul Islam Mondal</i>       |
|  |                                       | 604   | Add Weighted Algorithm based on the PICA and RBF Neural Network for Image Fusion<br><i>Rappy Saha and Ki-Doo Kim</i>   |
|  |                                       | 656   | Assessing the Usability of e-Government Websites of Bangladesh<br><i>Muhammad Nazrul Islam, S M Anisur Rahman and M Shahedul Islam</i>   |
|  |                                       | 668   | An IoT based Fire Alarming and Authentication System for Workhouse using Raspberry Pi 3<br><i>Ahmed Imteaj, Tanveer Rahman, Muhammad Kamrul Hossain, Mohammed Shamsul Alam and Saad Ahmad Rahat</i>            |
|  | <b>Day-2<br/>Poster<br/>Session-3</b> | <b>Session Name:</b> Communication, Networks and Security-II<br><b>Venue:</b> Heritage Club ( <i>Level-12</i> )<br><b>Session Chair:</b> Prof. Dr. Md. Nazrul Islam Mondal, RUET, Bangladesh<br><b>Session Co-Chair:</b> Dr. Md. Al Mamun, RUET, Bangladesh |  |
|  |                                       | 172   | Towards an IEEE 802.22 (WRAN) Based Wireless Broadband for Rural Bangladesh – Antenna Design and Coverage Planning<br><i>Arifa Haider, Rafi Rahman, Omar Faruk Noor, Foysal Alam, and Rachaen M. Huq</i>       |
|  |                                       | 186   | A Multi-level Method for Minimizing Data Gathering Latency in Wireless Sensor Networks using Mobile Elements<br><i>Rumpa Dasgupta and Arnab Dasgupta</i>   |
|  |                                       | 250   | A Fixed Assignment Based Window Access Scheme for Enhancing QoS of Vehicular Adhoc Networks<br><i>Md. Amirul Islam1, Shafika Showkat Moni and Mohammad Shah Alam</i>   |



|                          |   |     |  |
|--------------------------|---|-----|--|
|                          |   | 253 | Modified Markovian Decision Process Model for Limited Data Rate Usage Algorithm<br><i>Rupam Deb, Prakash Chandra Mondal, Mohammad Mahfuzul Islam and Khalid Hasan</i>  |
|                          |   | 358 | Review of Design for Security Techniques: Advancement and Challenges<br><i>Md. Imran Khan and Md. Ahasan Kabir</i>   |
|                          |   | 457 | Securing AOMDV Protocol in Mobile Adhoc Network with Elliptic Curve Cryptography<br><i>Jeenat Sultana and Tasnuva Ahmed</i>  |
|                          |   | 478 | Optical Wireless Data Transmission with Enhanced Substitution Caesar Cipher Wheel Encryption<br><i>Sabrina Abedin, Tasfia Tasbin and Avijit Hira</i>   |
|                          |   | 487 | A Multi-factor Authentication Mechanism for Fending the Phishing Attack of e-banking in Bangladesh<br><i>Supta Bhowmik, Sudipta Baral, Md. Atikur Rahaman and Amit Karmaker</i>  |
|                          |   | 490 | An Improved Steganographic Technique Based on Diamond Encoding Method<br><i>Md. Mokammel Haque, Jobayer Sheikh and Md. Jihan Al Rashid</i>   |
|                          |   | 579 | Design of an IoT Based Autonomous vehicle with the Aid of Computer Vision<br><i>Mohammad Rubaiyat Tanvir Hossain, Md. Asif Shahjalal and Nowroz Farhan Nur</i>   |
|                          |   | 608 | Advanced Real Time RFID Mutual Authentication Protocol using Dynamically Updated Secret Value Through Encryption And Decryption Process<br><i>Nure Alam Md. Risalat, Md. Tanvir Hasan, Md. Shahadat Hossain, Md. Mahbubur Rahman</i> |
|                          |   | 672 | Anti-theft Protection of Vehicle by GSM & GPS with Fingerprint Verification<br><i>Mrinmoy Dey, Md. Akteruzzaman Arif and Asif Mahmud</i>   |
|                          |   | 681 | Performance Improvement of IEEE 802.11n WLANs via Frame Aggregation in NS-3<br><i>Mir Md. Saki Kowsar and Sauman Biswas</i>  |
| <b>3:10 pm - 3:45 pm</b> | <b>Invited Session- II</b><br><b>Venue:</b> Conference Hall Sabrang ( <i>Level-02</i> )<br><b>Session Chair:</b> Prof. Dr. Shimamura, Saitama University, Japan   |     |  |
|                          | <b>Title:</b> Planar Antenna Structure for Low Frequency Application  |     |  |
|                          | <b>Speaker:</b> Mohammad Tariqul Islam, Universiti Kebangsaan Malaysia, Malaysia  |     |  |
| <b>3:45 pm – 4:00 pm</b> | <b>Tea Break</b><br><b>Venue:</b> Heritage Club ( <i>Level-12</i> )   |     |  |
| <b>4:00 pm - 4:40 pm</b> | <b>Keynote Session- V</b><br><b>Venue:</b> Conference Hall Sabrang ( <i>Level-02</i> )<br><b>Session Chair:</b> Prof. Dr. Sankar K. Pal, Distinguished Scientist & former Director of Indian Statistical Institute, India |     |  |

|  |  |
|--|--|
|  | <p><b>Title:</b> Intelligent System Applications in Solving Engineering Problems</p> <p><b>Speaker:</b> S. N. Singh, Department of Electrical Engineering, Indian Institute of Technology Kanpur, India</p>        |
| <p><b>4:45 pm - 5:25 pm</b></p>  | <p align="center"><b>Keynote Session- VI</b></p> <p align="center"><b>Venue:</b> Conference Hall Sabrang (<i>Level-02</i>)</p> <p align="center"><b>Session Chair:</b> Muhammad Ibrahim Khan, CUET, Bangladesh</p> |
|  | <p><b>Title:</b> Brain-Computer Interfacing: Motion Trajectory Prediction from EEG Signal</p>  |
|  | <p><b>Speaker:</b> Nazmul Siddique, Intelligent Systems Research Centre, Ulster University, Northland Road, Londonderry, BT48 7JL, U.K</p>   |
| <p><b>5:30 pm- 6:00 pm</b></p>   | <p align="center"><b>IEEE Student Program</b></p> <p align="center"><b>Venue:</b> Conference Hall Sabrang (<i>Level-02</i>)</p>  |
| <p><b>6:10 pm – 6:45 pm</b></p>  | <p align="center"><b>Session for Bangladesh Research and Education Network (BdREN)</b></p> <p align="center"><b>Venue:</b> Conference Hall Sabrang (<i>Level-02</i>)</p>   |
| <p><b>7:00 pm - 9:00 pm</b></p>  | <p align="center"><b>Closing Ceremony and Gala Dinner</b></p> <p align="center"><b>Venue:</b> Conference Hall Sabrang (<i>Level-02</i>)</p>  |
| <p><b>February 18, 2017</b></p> <p><b>Conference Tour (Only for authors / participants those paid tour fee of BDT. 2500 or equivalent)</b></p> |  |