<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Session</th>
<th>Chair(s)</th>
<th>Presenters</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 10, 2016</td>
<td>2:00-3:20</td>
<td>SEB 1200</td>
<td>Software Engineering Session 1</td>
<td>TBD</td>
<td>Khaled Badawy, Arzoo Tony, Dennis Bachmann, Saiqa Aleem</td>
</tr>
<tr>
<td></td>
<td>2:00-2:20</td>
<td></td>
<td>Semantic-Driven Integration for Open Environment and its Application to IoT</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2:20-2:40</td>
<td></td>
<td>Virtual Reality simulation of Bone Reaming process Modeling through WebGL Interface</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2:40-3:00</td>
<td></td>
<td>Overview on Recommender Systems</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3:00-3:20</td>
<td></td>
<td>Critical success factors to improve the game development process from a developer’s perspective</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>May 11, 2016</td>
<td>9:00-10:20</td>
<td>SEB 2200</td>
<td>Software Engineering Session 2</td>
<td>TBD</td>
<td>Daniel Berhane Araya, Saiqa Aleem, Yin Xizhe, Tamer Mohamed</td>
</tr>
<tr>
<td></td>
<td>9:00-9:20</td>
<td></td>
<td>Collective Contextual Anomaly Detection for Smart Buildings</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9:20-9:40</td>
<td></td>
<td>Empirical investigation of key business factors for digital game performance</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9:40-10:00</td>
<td></td>
<td>Incremental Clustering for Human Activity Recognition</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:00-10:20</td>
<td></td>
<td>Learn from the Past .. Succeed in the Future (in Software Projects)</td>
<td>TBD</td>
<td></td>
</tr>
</tbody>
</table>
Graduate Symposium 2016
Department of Electrical and Computer Engineering
May 10-12, 2016

May 11, 2016 10:30-11:50  SEB 2200
Software Engineering Session 3
Session Chair: TBD
Judges: TBD

10:30-10:50: MLaaS - Machine Learning as a Service, Mauro Ribeiro
10:50-11:10: Using a Pre-trained Deep Convolutional Neural Network with RGB Images for Classifying Gray-Level Images, Marjan Ramin
11:10-11:30: Predictive Model for e-Learning Personalization, MohammadNoor
11:30-11:50: Improving microcontroller education through software simulation, Kevin Brightwell

May 10, 2016 9:00-10:20  SEB 2200
Communication Systems and Data Networking Session 1
Session Chair: TBD
Judges: TBD

9:00-9:20: Aggregated V2I Communications for Improved Energy Efficiency using Non-Orthogonal Multiplexed Modulation, Liu Yanan
9:40-10:00: Fast Authentication in 5G HetNet through SDN Enabled Weighted Secure-Context-Information Transfer, Xiaoyu Duan
10:00-10:20: Intra-MME/S-GW Handover Performance Analysis in Virtualized 3GPP-LTE Systems, Mohamed Hussein Abdelwahab Ahmed
## Graduate Symposium 2016
### Department of Electrical and Computer Engineering
#### May 10-12, 2016

---

### May 10, 2016 10:30-11:30 SEB 2200
#### Communication Systems and Data Networking Session 2
**Session Chair:** TBD  
**Judges:** TBD

10:30-10:50: Localization Error Minimization: Combined Accelerometer with Reference Nodes, *Long Fei*


---

### May 10, 2016 3:40-3:40 SEB 1200
#### Communication Systems and Data Networking Session 3
**Session Chair:** TBD  
**Judges:** TBD

3:00-3:20: Virtualization of Wireless Sensor Networks: Throughput- and Time-Based Resource Scheduling, *Elena Uchiteleva*

3:20 – 3:40: A Novel R-PCA based Multivariate Fault-tolerant Data Aggregation Algorithm in WSNs, *Yu Tianqi*

3:40-4:00: Outage Probability and Capacity Analysis of the Collaborative NOMA Assisted Relaying System in 5G, *Xin Liu*

---

### May 11, 2016 9:00-10:20 SEB 1200
#### Communication Systems and Data Networking Session 4
**Session Chair:** TBD  
**Judges:** TBD

9:00-9:20: Dynamic SON-Enabled Mobility Management in LTE Networks, *Emad Aqeeli*


9:40-10:00: Feature Selection in Intrusion Detection Systems, *Mahsa Bataghva*

10:00-10:20: Location Verification in Wireless Networks, *Yu He*
### Power Systems Engineering Session 1

**Session Chair:** TBD  
**Judges:** TBD

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00-9:20</td>
<td>Fault Location in Shunt Capacitor Banks: Challenges and General Solution Approach</td>
<td>Hessamoddin Jouybari Moghaddam</td>
</tr>
<tr>
<td>9:20-9:40</td>
<td>DR based voltage regulators</td>
<td>Javad Khodabakhsh</td>
</tr>
<tr>
<td>9:40-10:00</td>
<td>Coordinated Control of PV Solar System as STATCOM (PV-STATCOM) and Power System Stabilizers for Power Oscillation Damping</td>
<td>Hesamaldin Maleki</td>
</tr>
<tr>
<td>10:00-10:20</td>
<td>Monitoring the Health of Neutral Grounding Systems</td>
<td>Rahim Jafari</td>
</tr>
</tbody>
</table>

### Power Systems Engineering Session 2

**Session Chair:** TBD  
**Judges:** TBD

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30-10:50</td>
<td>Application of MMC for PV integration</td>
<td>Hasan Bayati</td>
</tr>
<tr>
<td>10:50-11:10</td>
<td>Cascaded multi-level h-bridge inverter control with network delay compensation</td>
<td>Andrew Moore</td>
</tr>
<tr>
<td>11:10-11:30</td>
<td>Modeling and Control of PV Solar Farm for stabilizing Critical Induction Motor Loads during Fault Induced Delayed Voltage Recovery</td>
<td>Sibin Mohan</td>
</tr>
</tbody>
</table>

### Power Systems Engineering Session 3

**Session Chair:** TBD  
**Judges:** TBD

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:00-2:20</td>
<td>Frequency Control of Power System by Inverter Based Distributed Generators</td>
<td>Mohammad Akbari Kelishadi</td>
</tr>
<tr>
<td>2:20-2:40</td>
<td>Analysis and Mitigation of Over-Voltage Phenomenon in Accidentally-Islanded Grid-Connected Photovoltaic Inverters</td>
<td>MD MARUFUL ISLAM</td>
</tr>
<tr>
<td>2:40-3:00</td>
<td>Maximizing storage capacity under fault conditions utilizing an adjustable carrier modulation scheme</td>
<td>Andrew Moore</td>
</tr>
</tbody>
</table>
May 10, 2016  9:00-10:00  SEB 1200

**Robotics and Control Session 1**

Session Chair: TBD
Judges: TBD

9:00-9:20: Optimal Grasp Synthesis to Apply Normal and Shear Stresses of Failure in Beams, *Mahyar Abdeetedal*
9:20-9:40: Global Exponential Stabilization on SO(3), *Soulaimane Berkane*
9:40-10:00: Analysis of Integrity Insider Attacks on Cyber-physical Systems, *Xirong Ning*

May 10, 2016  10:30-11:10  SEB 1200

**Robotics and Control Session 2**

Session Chair: TBD
Judges: TBD

10:30-11:10: Driving In The Dark: Results From South Lunar Pole Analogue Study, *Matthew Cross*
10:30-11:10: Dielectric Elastomer Actuators for a Wrist Rehabilitation Device, *Myles Lidka*

May 11, 2016  10:30-11:50  SEB 2200

**Biomedical Systems Session 1**

Session Chair: TBD
Judges: TBD

10:30-10:50: A spread spectrum beamforming method for high-frame-rate Doppler Ultrasound Imaging, *Omar Mansour*
Graduate Symposium 2016
Department of Electrical and Computer Engineering
May 10-12, 2016

May 10, 2016  9:00-10:20  SEB 2202
Microsystems & Digital Signal Processing Session 1
Session Chair: TBD
Judges: TBD

9:00-9:20: On Non-Intrusive Speech Quality Estimation for Hearings Aids, Haniyeh Salehi
9:20-9:40: Modeling Multiport Networks Characterized by Noisy Frequency Data, Mohamed Sahouli
9:40-10:00: Time-domain Analysis of High-Speed Single Transmission Line Tree Structures Using Short-Circuit Interface Based Longitudinal-Partitioning Waveform Relaxation Algorithm, Tarik Menkad

May 10, 2016  10:30-11:10  SEB 2202
Microsystems & Digital Signal Processing Session 2
Session Chair: TBD
Judges: TBD

10:30-10:50: Speech Quality Estimation, Yousef Ali
10:50-11:10: Fast Transient Analysis of Large Interconnect Networks with Nonlinear Terminations, Sadia Wahid
11:10-11:30: A Controlling and Processing Core for Wireless Implantable Telemetry System, Naeeme Modir