

## ***The 1<sup>st</sup> International Workshop on Big Data Analytic for Cyber Crime Investigation and Prevention***

Monday, December 11<sup>th</sup>, 2017; Empire Room - 7th Fl

Workshop Chairs: Andrii Shalaginov, Katrin Franke, Jan William Johnsen; Norwegian University of Science and Technology

| <b>Time</b> | <b>Title</b>  | <b>Presenter/Author</b>   |
|-------------|---|---|
| 13:30-13:40 | <b>Opening Remarks and Welcome</b>  | Andrii Shalaginov   |
| 13:40-14:20 | Computational Forensics   | <b>Invited Speaker:</b> Katrin Franke<br>NTNU Digital Forensics Group                     |
| 14:20-14:40 | <i>"Neural Reputation Models learned from Passive DNS Data"</i>   | Pierre Lison and Vasileios Mavroeidis   |
| 14:40-15:00 | <i>"Extracting Cyber Threat Intelligence From Hacker Forums: Support Vector Machines versus Convolutional Neural Networks"</i>                  | Isuf Deliu, Katrin Franke, and Carl Leichter  |
| 15:00-15:20 | <i>"Forensics Analysis of Wi-Fi Communication Traces in Mobile Devices"</i>   | Anja Evelyn Amundsen and Kenneth M. Owens   |
| 15:20-15:30 | <i>"Topical Behavior Prediction from Massive Logs"</i>  | Shih-Chieh Su   |
| 15:30-15:50 | <b>Coffee Break</b>   |   |
| 15:50-16:10 | <i>"Identifying Extremism in Social Media with Multi-view Context-Aware Subset Optimization"</i>  | Sreyasee Das Bhattacharjee, Bala Venkatram Balantrapu, William Tolone, and Ashit Talukder |
| 16:10-16:30 | <i>"Introducing DeepBalance: Random Deep Belief Network Ensembles to Address Class Imbalance"</i>   | Peter Xenopoulos  |
| 16:30-16:50 | <i>"Forensic Database Reconstruction"</i>   | Joshua Sablatura, Bing Zhou   |
| 16:50-17:10 | <i>"A First Estimation of the Proportion of Cybercriminal Entities in the Bitcoin Ecosystem using Supervised Learning"</i>                      | Haohua Sun Yin and Ravi Vatrappu  |
| 17:10-17:30 | <i>"Exploratory studies into forensic logs for criminal investigation using case studies in industrial control systems in the power sector"</i> | Asif Iqbal  |
| 17.30-17:40 | <b>Closing Remarks</b>  |   |