Technical Program of

IEEE/ACM ASONAM 2016

FOSINT-SI 2016

HI-BI-BI 2016

FAB 2016

and collocated workshops

18-21 August 2016
Sir Francis Drake Hotel
San Francisco – CA, USA

Academic & industry Sponsors

TCDE

<table>
<tr><td colspan="5" align="center">Program Overview for
IEEE/ACM ASONAM 2016 -- FOSINT-SI 2016 – HI-BI-BI 2016 – FAB 2016 and collocated workshops</td></tr>
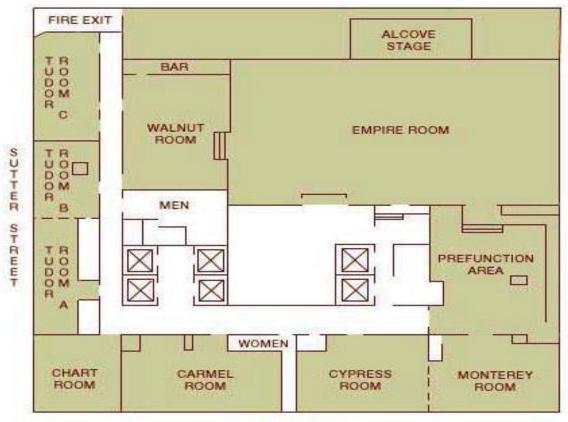<tr><td>7:30</td><td colspan="4" align="center">Registration</td></tr>
<tr><td colspan="5" align="center">Thursday 18 August</td></tr>
<tr>
<td>8:00 - 9:30</td>
<td>SNAST 2016

Wine Salon</td>
<td>WOSINF 2016

Tudor C</td>
<td>SNAA 2016

Tudor A-B</td>
<td>Arno's hands on workshop -- Cypress/Monterey
Hands on training on understanding and using Building Blocks and Successive Fractions search strategies in combination with Citation Pearl Growing to find academic data in a blink of the eye by Arno H.P. Reuser</td>
</tr>
<tr><td>9:30 - 10:00</td><td colspan="4" align="center">Break   -- Empire/Walnut/Prefuntion</td></tr>
<tr>
<td>10:00 - 12:00</td>
<td>SNAST 2016
Wine Salon</td>
<td>WOSINF 2016
Tudor C</td>
<td>SNAA 2016
Tudor A-B</td>
<td>PhD Forum full papers session and feedback to students
-- Cypress/Monterey</td>
</tr>
<tr><td>12:00-13:00</td><td colspan="4" align="center">Lunch Break -- Empire/Walnut/Prefuntion</td></tr>
<tr>
<td>13:00- 15:00</td>
<td>DYNO 2016
Carmel</td>
<td>MSNDS 2016
Tudor C</td>
<td colspan="2">Posters/Demos madness session for main conference, symposiums and workshops
Chairs: Keivan Kianmehr and Nima Dokoohaki
-- Cypress/Monterey</td>
<td>Multidisciplinary S1:
Wine Salon</td>
</tr>
<tr><td>15:00-15:30</td><td colspan="4" align="center">Break   --   Empire/Walnut/Prefuntion</td></tr>
<tr>
<td>15:30-17:00</td>
<td>DYNO 2016
Carmel</td>
<td>MSNDS 2016
Tudor C</td>
<td colspan="2">PhD Forum full papers session
and feedback to students
-- Cypress/Monterey</td>
<td>Multidisciplinary S2:
Wine Salon</td>
</tr>
<tr><td>19:00-21:00</td><td colspan="4" align="center">Reception /Posters -- Empire/Walnut/Prefuntion</td></tr>
<tr><td colspan="5" align="center">Thursday 18 August</td></tr>
<tr>
<td>8:00-10:00</td>
<td colspan="4">Tutorial 1 - Evolutionary Computation for Community Detection in Complex Networks
Clara Pizzuti   --   Empire/Walnut/Prefuntion</td>
</tr>
<tr><td>10:00 - 10:30</td><td colspan="4" align="center">Lunch Break -- Empire/Walnut/Prefuntion</td></tr>
<tr>
<td>10:00 -12:00</td>
<td colspan="4">Tutorial 2 - Introduction to Social Media Network Analysis with NodeXL
Dr. Marc A. Smith and Harald Meier   --   Empire/Walnut/Prefuntion</td>
</tr>
<tr><td colspan="5" align="center">Break</td></tr>
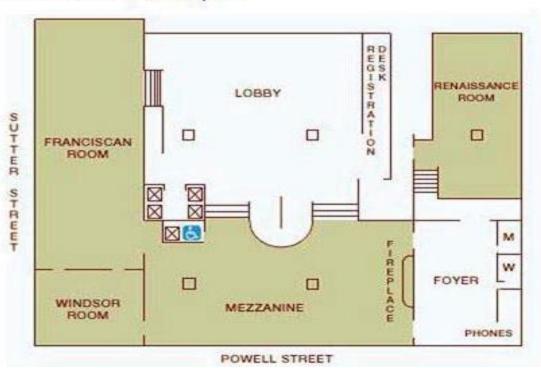<tr>
<td>13:00 - 15:00</td>
<td colspan="4">Tutorial 3 - Identifying Malicious Actors on Social Media
Srijan Kumar, Francesca Spezzano, and V.S. Subrahmanian   --   Empire/Walnut/Prefuntion</td>
</tr>
</table>

	Time		A	B	C			
19th August	7:30	Registration						
	0830--0930	**Plenary 1**	**Brian Uzzi, Northwestern University, USA -- Empire/Walnut/Prefuntion**			**Chair: VS Subrahmanian**		
	0930--1000	Break	-- Empire/Walnut/Prefuntion -- posters and demos					
	1000--1200	Session 1	1: Best Papers -- Empire			FOSINT-SI -S1: Tudor C		Multidisciplinary S3: Wine Salon
	1200--1300	Lunch	---- Empire/Walnut/Prefuntion					
	1300--1500	Session 2	2A: Graphs Empire	2B: Communities -- Cypress/Monterey	2C: Politics, Unrest Carmel	FOSINT-SI keynote & S2: Tudor C		Multidisciplinary S4: Wine Salon
	1500--1530	Break	-- Empire/Walnut/Prefuntion -- posters and demos					
	1530--1700	Panel	--- Empire/Walnut/Prefuntion **Moderator:** VS Subrahmanian **Topic:** "Social Network Analysis for Social Good"					
	19:00-21:30	Banquet	-- Empire/Walnut/Prefuntion					
20th August	7:30	Registration						
	0830--0930	**Plenary 2**	**Evimaria_Terzi, Boston University, USA -- Empire/Walnut/Prefuntion**			**Chair: Hanghang Tong**		
	0930--1000	Break	-- Empire/Walnut/Prefuntion -- posters and demos					
	1000--1200	Session 3	3A: Sampling and Streaming -- Empire	3B: Social Networks -- Cypress/Monterey	3C:Adversarial/Trust 1 Carmel	FOSINT-SI -S3 Tudor C	FAB-S1: Tudor A-B	Multidisciplinary S 5: Wine Salon
	1200--1300	Lunch	---- Empire/Walnut/Prefuntion					
	1300--1400	**Plenary 3**	**Lise Getoor, University of California, Santa Cruz, USA -- Empire/Walnut/Prefuntion**			**Chair: Jon Rokne**		
	1400--1430	Break	-- Empire/Walnut/Prefuntion					
	1430--1630	Session 4	4A: Algorithmic methods -- Empire	4B:Information Sharing -- Cypress/Monterey	4C: Spatial Carmel		FAB-S2: Tudor A-B	Multidisciplinary S6: Wine Salon
21st August	7:30	Registration						
	0830--0930	**Plenary 4**	**Lada Adamic, Facebook, USA -- Empire/Walnut/Prefuntion**			**Chair: James Caverlee**		
	0930--1000	Break	-- Empire/Walnut/Prefuntion					
	1000--1200	Session 5	5A: Machine learning methods -- Empire	5B: Communities 2 -- Cypress/Monterey	5C: Applications Carmel	HIBIHI-S1: Tudor C	FAB-S3 Tudor A-B	Industrial Track S1: Wine Salon
	1200--1300	Lunch	Empire/Walnut/Prefuntion					
	1300--1500	Session 6	6A: Recommender sys. -- Empire	6B: Social Media 1 -- Cypress/Monterey	6C: New Directions Carmel	HIBIHI-S2: Tudor C	FAB-S4: Tudor A-B	Industrial Track S2: Wine Salon
	1500--1530	Break	-- Empire/Walnut/Prefuntion					
	1530--1700	Session 7	7A: Markets -- Empire	7B: Social media 2 -- Cypress/Monterey	7C:Adversarial/Trust 2 Carmel	HIBIHI-S3: Tudor C		

Second Floor Floorplan

FIRE EXIT

TUDOR ROOM C

TUDOR ROOM B

TUDOR ROOM A

SUTTER STREET

BAR

WALNUT ROOM

MEN

ALCOVE STAGE

EMPIRE ROOM

PREFUNCTION AREA

WOMEN

CHART ROOM

CARMEL ROOM

CYPRESS ROOM

MONTEREY ROOM

POWELL STREET

Mezzanine Level Floorplan

SUTTER STREET

FRANCISCAN ROOM

LOBBY

REGISTRATION DESK

RENAISSANCE ROOM

WINDSOR ROOM

MEZZANINE

FIREPLACE

FOYER

M

W

PHONES

POWELL STREET

60	**1: Best Papers Chair: Shang Gao Room: Empire**	
30	Influence based Analysis of Community Consistency in Dynamic Networks	Xiaowei Jia (University of Minnesota, Twin Cities, United States) and Xiaoyi Li (State University of New York at Buffalo, United States) and Nan Du (State University of New York at Buffalo, United States) and Yuan Zhang (North Carolina State University, United States) and Vishrawas Gopalakrishnan (State University of New York at Buffalo, United States) and Guangxu Xun (State University of New York at Buffalo, United States) and Aidong Zhang (State University of New York at Buffalo, United States)
30	Stop Clickbait: Detecting and Preventing Clickbaits in Online News Media	Abhijnan Chakraborty (Indian Institute of Technology Kharagpur, India) and Bhargavi Paranjape (Indian Institute of Technology Kharagpur, India) and Sourya Kakarla (Indian Institute of Technology Kharagpur, India) and Niloy Ganguly (Indian Institute of Technology Kharagpur, India)

120	**2A: Graphs Chair: Antwan D. Clark Room: Empire**	
30	Streaming METIS Partitioning	Ghizlane Echbarthi (University Lyon 1, France) and Hamamache Kheddouci (University Lyon 1, France)
30	New Stopping Criteria For Spectral Partitioning	James Fairbanks (Georgia Institute of Technology, United States) and Anita Zakrzewska (Georgia Tech, United States) and David A. Bader (Georgia Institute of Technology, United States)
30	Local Triangle-Densest Subgraphs	Raman Samusevich (Czech Technical University in Prague, Czech Republic) and Maximilien Danisch (Institut Mines Telecom, Telecom Paristech, CNRS, Paris, France) and Mauro Sozio (Institut Mines Telecom, Telecom Paristech, CNRS, Paris, France)
30	Tradeoffs between Density and Size in Extracting Dense Subgraphs: A Unified Framework	Zhefeng Wang (University of Science and Technology of China, China) and Lingyang Chu (Simon Fraser University, Canada) and Jian Pei (Simon Fraser University, Canada) and Enhong Chen (University of Science and Technology of China, China) and Abdullah Al-Barakati (King Abdulaziz University, Saudi Arabia)

120	**3A: Sampling and Streaming Chair: Carlos Sarraute Room: Empire**	
30	Estimating Exponential Random Graph Models using Sampled Network Data via Graphon	Ran He (Bell Labs, United States) and Tian Zheng (Columbia University, United States)
30	Rank Degree: An Efficient Algorithm for Graph Sampling	Elli Voudigari (Athens University of Economics and Business, Greece) and Nikos Salamanos (Athens University of Economics and Business, Greece) and Theodore Papageorgiou (Athens University of Economics and Business, Greece) and Emmanuel Yannakoudakis (Athens University of Economics and Business, Greece)
30	Query-Friendly Compression of Graph Streams	Arijit Khan (NTU, Singapore) and Charu Aggarwal (IBM T. J. Watson Research Center, United States)
30	Classification in Dynamic Streaming Networks	Yibo Yao (Washington State University, United States) and Lawrence Holder (Washington State University, United States)

120	**4A: Algorithmic methods** **Chair: Jeremy Wendt** **Room: Empire**	
30	NIMBLECORE: A Space-efficient External Memory Algorithm for Estimating Core Numbers	Priya Govindan (Rutgers University, United States) and Sucheta Soundarajan (Syracuse University, United States) and Tina Eliassi-Rad (Northeastern University, United States) and Christos Faloutsos (Carnegie Mellon University, United States)
30	All-Pairs Shortest Distances Maintenance in Relational DBMSs	Sergio Greco (University of Calabria, Italy) and Cristian Molinaro (University of Calabria, Italy) and Chiara Pulice (University of Calabria, Italy) and Ximena Quintana (University of Calabria, Italy)
30	Togetherness: An Algorithmic Approach to Network Integration	Anastasia Moskvina (Auckland University of Technology, New Zealand) and Jiamou Liu (The University of Auckland, New Zealand)
30	On the Guarantee of Containment Probability in Influence Minimization	Chien-Wei Chang (National Cheng Kung University, Taiwan) and Mi-Yen Yeh (Institute of Information Science, Academia Sinica, Taiwan) and Kun-Ta Chuang (National Cheng Kung University, Taiwan)

120	**5A: Machine learning methods** **Chair: Jalal Kawash** **Room: Empire**	
30	Network Classification Using Adjacency Matrix Embeddings and Deep Learning	Ke Wu (Rensselaer Polytechnic Institute, United States) and Philip Watters (Rensselaer Polytechnic Institute, United States) and Malik Magdon-Ismail (Rensselaer Polytechnic Institute, United States)
30	Weakly Hierarchical Lasso based Learning to Rank in Best Answer Prediction	Qiongjie Tian (Arizona State University, United States) and Baoxin Li (Arizona State University, United States)
20	Priority Rank Model: a Universal Tool for Social Network Generation	Mikolaj Morzy (Poznan University of Technology, Poland) and Przemysław Kazienko (Wrocław University of Science and Technology, Poland) and Tomasz Kajdanowicz (Wrocław University of Science and Technology, Poland)
20	An Information Theoretic Approach to Generalised Blockmodelling for the Identification of Meso-Scale Structure in Networks	Neil Hurley (Insight Centre for Data Analytics, University College Dublin, Ireland) and Erika Duriakova (Insight Centre for Data Analytics, University College Dublin, Ireland)
20	Bayesian Model Selection of Stochastic Block Models	Xiaoran Yan (Indiana University, United States)

110	**6A: Recommender sys.** **Chair: John O'Donovan** **Room: Empire**	
30	Downside Management in Recommender Systems	Huan Gui (University of Illinois at Urbana-Champaign, United States) and Haishan Liu (LinkedIn Corp, United States) and Jiawei Han (University of Illinois at Urbana-Champaign, United States)
20	Collaborative Restricted Boltzmann Machine for Social Event Recommendation	Xiaowei Jia (University of Minnesota, United States) and Xiaoyi Li (State University of New York at Buffalo, United States) and Kang Li (State University of New York at Buffalo, United States) and Vishrawas Gopalakrishnan (State University of New York at Buffalo, United States) and Guangxu Xun (State University of New York at Buffalo, United States) and Aidong Zhang (State University of New York at Buffalo, United States)
20	Twitter Message Recommendation Based on User Interest Profiles	Raheleh Makki Niri (Dalhousie University, Canada) and Axel J. Soto (University of Manchester, United Kingdom) and Stephen Brooks (Dalhousie University, Canada) and Evangelos E. Milios (Dalhousie University, Canada)
20	Generating Risk Reduction Recommendations to Decrease Vulnerability of Public Online Profiles	Janet Zhu (Georgetown University, United States) and Sicong Zhang (Georgetown University, United States) and Lisa Singh (Georgetown University, United States) and Grace Hui Yang (Georgetown University, United States) and Micah Sherr (Georgetown University, United States)
20	Exploring Influence Among Participants for Event Recommendation	Yi Liao (The Chinese University of Hong Kong, Hong Kong) and Xinshi Lin (The Chinese University of Hong Kong, Hong Kong) and Wai Lam (The Chinese University of Hong Kong, Hong Kong)

100	7A: Markets Chair: Jon Rokne Room: Empire	
30	Targeting Algorithms for Online Social Advertising Markets	Chaolun Xia (Rutgers University, United States) and Shan Muthukrishnan (Rutgers University, Microsoft India, United States) and Saikat Guha (Microsoft Research, India, India)
30	Higher-order correlations of consumption patterns in social-economic networks	Yannick Léo (ENS de Lyon, France) and Márton Karsai (ENS de Lyon, France) and Carlos Sarraute (Grandata Labs, Argentina) and Eric Fleury (ENS Lyon / INRIA, France)
20	Understanding the Importance of Rewards on Reward-Based Crowdfunding Platforms	Yusan Lin (Penn State University, United States) and Chung-Chou H. Chang (University of Pittsburgh, United States) and Wang-Chien Lee (Penn State University, United States)
20	Heuristics for Advertising Revenue Optimization in Online Social Networks	Inzamam Rahaman (The University of the West Indies, Trinidad and Tobago) and Patrick Hosein (The University of the West Indies, Trinidad and Tobago)

120	2B: Communities Chair: Tanmoy Chakraborty Room: Cypress/Monterey	
30	Non-Sharing Communities? An Empirical Study of Community Detection for Access Control Decisions	Gaurav Misra (Lancaster University, United Kingdom) and Jose M. Such (Lancaster University, United Kingdom) and Hamed Balogun (Lancaster University, Nigeria)
20	Functional Cluster Extraction from Large Spatial Networks	Takayasu Fushimi (University of Tsukuba, Japan) and Kazumi Saito (University of Shizuoka, Japan) and Tetsuo Ikeda (University of Shizuoka, Japan) and Kazuhiro Kazama (Wakayama University, Japan)
20	Network Completion via Joint Node Clustering and Similarity Learning	Dimitrios Rafailidis (Department of Informatics, Aristotle University of Thessaloniki, Greece) and Fabio Crestani (Faculty of Informatics, Universita della Svizzera italiana (USI), Switzerland)
20	Sensitivity and Reliability in Incomplete Networks: Centrality Metrics to Community Scoring Functions	Soumya Sarkar (IIT Kharagpur, India) and Suhansanu Kumar (UIUC, Champaign, IL, United States) and Sanjukta Bhowmick (Univ. of Nebraska, Omaha, United States) and Animesh Mukherjee (IIT Kharagpur, India)
30	Ensemble-Based Algorithms to Detect Disjoint and Overlapping Communities in Networks	Tanmoy Chakraborty (University of Maryland, College Park MD 20742, United States) and Noseong Park (University of Maryland, College Park MD 20742, United States) and V.S. Subrahmanian (University of Maryland, College Park MD 20742, United States)

120	3B: Social Networks Chair: Atanu Roy Room: Cypress/Monterey	
20	Social Network Dominance based on Analysis of Asymmetry	Yuemeng Li (University of North Carolina at Charlotte, United States) and Xintao Wu (University of Arkansas, United States) and Song Yang (University of Arkansas, United States)
20	MaxReach: Reducing Network Incompleteness through Node Probes	Sucheta Soundarajan (Syracuse University, United States) and Tina Eliassi-Rad (Northeastern University, United States) and Brian Gallagher (Lawrence Livermore National Laboratory, United States) and Ali Pinar (Sandia National Laboratories, United States)
20	Predicting Anchor Links between Heterogeneous Social Networks	Sina Sajadmanesh (Sharif University of Technology, Iran, Islamic Republic of) and Hamid R. Rabiee (Sharif University of Technology, Iran, Islamic Republic of) and Ali Khodadadi (Sharif University of Technology, Iran, Islamic Republic of)
20	Benchmarking Online Social Networks	Pablo Nicolas Terevinto (Universitat Politècnica de Valèncica, Spain) and Miguel Pérez (Universitat Politècnica de Valèncica, Spain) and Josep Domènech (Universitat Politècnica de Valèncica, Spain) and José A. Gil (Universitat Politècnica de Valèncica, Spain) and Ana Pont (Universitat Politècnica de Valèncica, Spain)
20	On the delta-Hyperbolicity in Complex Networks	Hend Alrasheed (Kent State University, United States)
20	Why not Scale Free? Simulating Company Ego Networks on Twitter	Yoav Achiam (Bar Ilan University, Israel) and Inbal Yahav (Bar Ilan University, Israel) and David Schwartz (Bar Ilan University, Israel)

120	**4B: Information Sharing Chair: Francesca Spezzano Room: Cypress/Monterey**	
30	Intertwined Viral Marketing in Social Networks	Jiawei Zhang (University of Illinois at Chicago, United States) and Senzhang Wang (Beihang University, China) and Qianyi Zhan (Nanjing University, China) and Philip S Yu (University of Illinois at Chicago, United States)
30	Analyzing information sharing strategies of users in online social networks	Dong-Anh Nguyen (University of California at Santa Barbara, United States) and Shulong Tan (Baidu Big Data Lab, United States) and Ram Ramanathan (Network Research Department, Raytheon BBN Technologies, United States) and Xifeng Yan (University of California at Santa Barbara, United States)
30	Learning Cascaded Social Influence Under Partial Monitoring	Jiaqi Ma (Tsinghua University, China) and Jie Zhang (Tsinghua University, China) and Jie Tang (Tsinghua University, China)
30	Community-based delurking in social networks	Roberto Interdonato (Dept. Computer Engineering, Modeling, Electronics, and Systems Sciences, University of Calabria, Italy) and Chiara Pulice (Dept. Computer Engineering, Modeling, Electronics, and Systems Sciences, University of Calabria, Italy) and Andrea Tagarelli (Dept. Computer Engineering, Modeling, Electronics, and Systems Sciences, University of Calabria, Italy)

120	**5B: Communities 2 Chair: Giulio Rossetti Room: Cypress/Monterey**	
30	Dynamic Community Detection based on Distance Dynamics	Qian Guo (Beijing Key Laboratory of Intelligence Telecommunication Software and Multimedia, Beijing University of Posts and Telecommunications, Beijing,100876, China, China) and Lei Zhang (Beijing Key Laboratory of Intelligence Telecommunication Software and Multimedia, Beijing University of Posts and Telecommunications, Beijing,100876, China, China) and Bin Wu (Beijing Key Laboratory of Intelligence Telecommunication Software and Multimedia, Beijing University of Posts and Telecommunications, Beijing,100876, China, China) and Xuelin Zeng (Beijing Key Laboratory of Intelligence Telecommunication Software and Multimedia, Beijing University of Posts and Telecommunications, Beijing,100876, China, China)
30	Enumerating Maximal Cliques in Temporal Graphs	Anne-Sophie Himmel (TU Berlin, Germany) and Hendrik Molter (TU Berlin, Germany) and Rolf Niedermeier (TU Berlin, Germany) and Manuel Sorge (TU Berlin, Germany)
20	Evaluation Measures for Clustering Quality on Graph Samples	Jianpeng Zhang (Eindhoven University of Technology, Netherlands) and Yulong Pei (Eindhoven University of Technology, Netherlands) and George Fletcher (Eindhoven University of Technology, Netherlands) and Mykola Pechenizkiy (Eindhoven University of Technology, Netherlands)
20	A Local Measure of Community Change in Dynamic Graphs	Anita Zakrzewska (Georgia Institute of Technology, United States) and Eisha Nathan (Georgia Institute of Technology, United States) and James Fairbanks (Georgia Institute of Technology, United States) and David A. Bader (Georgia Institute of Technology, United States)
20	A Parameter-Free Method for Detecting Local Communities Based on Attainable Information	Ardavan Afshar (Shiraz University, Iran, Islamic Republic of) and Mansoor Zolghadri Jahromi (Faculty of computer Science and engineering, School of engineering, Shiraz University, Siraz, Iran., Iran, Islamic Republic of) and Ali Hamzeh (Shiraz University, Iran, Islamic Republic of)

120	6B: Social Media 1 Chair: Flo Reeder Room: Cypress/Monterey	
30	From Migration Corridors to Clusters: The Value of Google+ Data for Migration Studies	Johnnatan Messias (Universidade Federal de Minas Gerais (UFMG), Brazil) and Fabricio Benevenuto (Universidade Federal de Minas Gerais (UFMG), Brazil) and Ingmar Weber (Qatar Computing Research Institute, Qatar) and Emilio Zagheni (University of Washington, United States)
30	How Fashionable is Each Street?: Quantifying Road Characteristics using Social Media	Takuya Nishimura (NTT Service Evolution Laboratories, NTT Corporation, Japan) and Kyosuke Nishida (NTT Service Evolution Laboratories, NTT Corporation, Japan) and Hiroyuki Toda (NTT Service Evolution Laboratories, NTT Corporation, Japan) and Hiroshi Sawada (NTT Service Evolution Laboratories, NTT Corporation, Japan)
20	From Event Detection to Story Telling on Microblogs: A Statistical Approach	Janani Kalyanam (University of California, San Diego, United States) and Sumithra Velupillai (Kings College, London, United Kingdom) and Mike Conway (University of Utah, United States) and Gert Lanckriet (Department of Electrical and Computer Engineering, UC San Diego, United States)
20	Authorship Identification in Bengali Language: A Graph Based Approach	Tanmoy Chakraborty (University of Maryland, College Park MD 20742, United States) and Prasenjit Choudhury (National Institute of Technology, Durgapur West Bengal, India 713209, India)
20	Finding Needles of Interested Tweets in the Haystack of Twitter Network	Qiongjie Tian (Arizona State University, United States) and Jashmi Lagisetty (Arizona State University, United States) and Baoxin Li (Arizona State University, United States)

90	7B: Social media 2 Chair: David Skillicorn Room: Cypress/Monterey	
30	Emotion- and Area-Driven Topic Shift Analysis in Social Media Discussions	Kamil Topal (Case Western Reserve University, United States) and Mehmet Koyuturk (Case Western Reserve University, United States) and Gultekin Ozsoyoglu (Case Western Reserve University, United States)
20	What we write about when we write about causality: Features of causal statements across large-scale social discourse	Thomas McAndrew (University of Vermont, United States) and Joshua Bongard (University of Vermont, United States) and Chris Danforth (University of Vermont, United States) and Peter Dodds (University of Vermont, United States) and Paul Hines (University of Vermont, United States) and James Bagrow (University of Vermont, United States)
20	Core-Periphery Clustering and Collaboration Networks	Pierluigi Crescenzi (Universita' degli Studi di Firenze, Italy) and Pierre Fraigniaud (CNRS and University Paris Diderot, France) and Zvi Lotker (Ben Gurion University, Israel) and Paolo Penna (Department of Computer Science, ETH Zurich, Switzerland)
20	Temporal Mechanisms of Polarization in Online Reviews	Antonis Matakos (University of Ioannina, Greece) and Panayiotis Tsaparas (University of Ioannina, Greece)

120	2C: Politics, Unrest	Chair: Dimitris Spiliotopoulos	Room: Carmel

30	Community Detection in Political Twitter Networks using Nonnegative Matrix Factorization Methods	Mert Ozer (Arizona State University, United States) and Nyunsu Kim (Arizona State University, United States) and Hasan Davulcu (Arizona State University, United States)
30	On Predicting Social Unrest Using Social Media	Rostyslav Korolov (Rensselaer Polytechnic Institute, United States) and Di Lu (Rensselaer Polytechnic Institute, United States) and Jingjing Wang (University of Illinois at Urbana-Champaign, United States) and Guangyu Zhou (University of Illinois at Urbana-Champaign, United States) and Claire Bonial (U.S. Army Research Laboratory, United States) and Clare Voss (U.S. Army Research Laboratory, United States) and Lance Kaplan (U.S. Army Research Laboratory, United States) and William Wallace (Rensselaer Polytechnic Institute, United States) and Jiawei Han (University of Illinois at Urbana-Champaign, United States) and Heng Ji (Rensselaer Polytechnic Institute, United States)
20	haracterizing Communal Microblogs during Disaster Events	Koustav Rudra (Indian Institute of Technology, Kharagpur, India) and Ashish Sharma (Indian Institute of Technology, Kharagpur, India) and Niloy Ganguly (Indian Institute of Technology Kharagpur, India) and Saptarshi Ghosh (Indian Institute of Engineering Science and Technology Shibpur, India)
20	Investigating the complete corpus of Referendum and Elections tweets	Despoina Antonakaki (FORTH ICS, Greece) and Dimitris Spiliotopoulos (FORTH ICS, Greece) and Christos V. Samaras (FORTH ICS, Greece) and Sotiris Ioannidis (FORTH ICS, Greece) and Paraskevi Fragopoulou (FORTH ICS, Greece)
20	Understanding Citizen Reactions and Ebola-Related Information Propagation on Social Media	Thanh Tran (Utah State University, United States) and Kyumin Lee (Utah State University, United States)

120	3C: Adversarial/Trust 1	Chair: Enrique Ortega	Room: Carmel

30	Joining User Profiles Across Online Social Networks: from the Perspective of an Adversary	Qiang Ma (Rutgers University, United States) and Han Hee Song (Narus Inc., United States) and S Muthukrishnan (Rutgers University, United States) and Antonio Nucci (Narus Inc., United States)
30	Prediction of Cyberbullying Incidents in a Media-based Social Network	Homa Hosseinmardi (university of colorado boulder, United States) and Rahat Ibn Rafiq (university of colorado boulder, United States) and Richard Han (university of colorado boulder, United States) and Qin Lv (university of colorado boulder, United States) and Shivakant Mishra (university of colorado boulder, United States)
20	Hiding in Plain Sight: Characterizing and Detecting Malicious Facebook Pages	Prateek Dewan (IIIT-Delhi, India) and Shrey Bagroy (IIIT-Delhi, India) and Ponnurangam Kumaraguru (IIIT-Delhi, India)
20	Detecting Malicious Campaigns in Crowdsourcing Platforms	Hongkyu Choi (Utah state University, United States) and Kyumin Lee (Utah state University, United States) and Steve Webb (Georgia Institute of Technology, United States)
20	Trust and Privacy Correlations in Social Networks A Deep Learning Framework	Shatha Jaradat (KTH, Sweden) and Nima Dokoohaki (KTH, Sweden) and Mihhail Matskin (KTH, Sweden) and Elena Ferrari (University of Insubria, Italy)

110	4C: Spatial Chair: Martin Atzmueller Room: Carmel	
30	Percimo: Location Estimation in Social Media: Exploiting the Correlation Between Content and Locations	Guangchao Yuan (NC State University, United States) and Pradeep Kumar Murukannaiah (North Carolina State University, United States) and Munindar Singh (NCSU, United States)
30	Community-Based Geospatial Tag Estimation	Wei Niu (Texas A&M University, United States) and James Caverlee (Texas A&M University, United States) and Haokai Lu (Texas A&M University, United States) and Krishna Kamath (Texas A&M University, College Station, United States)
30	Exploiting Spatial-Temporal-Social Constraints for Localness Inference Using Online Social Media	Chao Huang (University of Notre Dame, United States) and Dong Wang (University of Notre Dame, United States)
20	Co-Location Social Networks: Linking the Physical World and Cyberspace	Huandong Wang (Tsinghua University, China) and Yong Li (Tsinghua University, China) and Yang Chen (Fudan University, China) and Yue Wang (Tsinghua University, China) and Jian Yuan (Tsinghua University, China) and Depeng Jin (Tsinghua University, China)

130	5C: Applications Chair: Amita Kapoor Room: Carmel	
30	Web User Profiling using Data Redundancy	Xiaotao Gu (Tsinghua University, Beijing, China) and Hong Yang (Tsinghua University, China) and Jie Tang (Tsinghua University, China) and Jing Zhang (Tsinghua University, China)
30	Can I foresee the success of my Meetup group?	Soumajit Pramanik (IIT, Kharagpur, India) and Midhun Gundapuneni (IIT, Kharagpur, India) and Sayan Pathak (Microsoft Corporation, United States) and Bivas Mitra (IIT, Kharagpur, India)
20	Subconscious Crowdsourcing: A Feasible Data Collection Mechanism for Mental Disorder Detection on Social Media	Chun-Hao Chang (National Tsing Hua University, Taiwan) and Elvis Saravia (National Tsing Hua University, Taiwan) and Yi-Shin Chen (National Tsing Hua University, Taiwan)
20	Case Study: A Visual Analysis of Student Behavior in Massive Open Online Courses	James Schaffer (UC Santa Barbara, United States) and John O'Donovan (UC Santa Barbara, United States) and Brandon Huynh (UC Santa Barbara, United States) and Yinglong Xia (IBM, United States) and Sabrina Lin (IBM, United States)
30	Personality Homophily and the Local Network Characteristics of Facebook	Nyala Noe (Cardiff University, United Kingdom) and Roger M. Whitaker (Cardiff University, United Kingdom) and Stuart M. Allen (Cardiff University, United Kingdom)

120	6C: New Directions Chair: Michelle Ibanez Room: Carmel	
30	Social Badge System Analysis	Jiawei Zhang (University of Illinois at Chicago, United States) and Xiangnan Kong (Worcester Polytechnic Institute, United States) and Philip S. Yu (University of Illinois at Chicago, United States)
20	A First Look at User Activity on Tinder	Gareth Tyson (Queen Mary University of London, United Kingdom) and Claudiu Perta (Sapienza University of Rome, Italy) and Hamed Haddadi (Queen Mary University of London, United Kingdom) and Micheal Seto (The Royal, Canada)
20	New to Online Dating? Learning from Experienced Users for a Successful Match	Mo Yu (College of Information Sciences and Technology, The Pennsylvania State University, United States) and Xiaolong Zhang (College of Information Sciences and Technology, The Pennsylvania State University, United States) and Derek Kreager (Department of Sociology and Criminology, The Pennsylvania State University, United States)
20	Dynamics of large scale networks following a merger	John Clements (Brock University, Canada) and Henryk Fuk'S (Brock University, Canada) and Babak Farzad (Brock University, Canada)
30	The Collapse of the Friendster Network Started from the Center of the Core	Kazunori Seki (University of Tokyo, Japan) and Masataka Nakamura (University of Tokyo, Japan)

100	7C: Adversarial/Trust 2 Chair: Jiawei Zhang Room: Carmel	
30	A New Approach to Bot Detection: The Importance of Recall	Fred Morstatter (Arizona State University, United States) and Liang Wu (Arizona State University, United States) and Tahora Hossein Nazer (Arizona State University, United States) and Kathleen Carley (Carnegie Mellon University, United States) and Huan Liu (Arizona State University, United States)
30	Detecting Misinformation in Online Social Networks Before It Is Too Late	Huiling Zhang (University of Florida, United States) and Alan Kuhnle (University of Florida, United States) and Huiyuan Zhang (University of Florida, United States) and My T. Thai (University of Florida, United States)
20	Trustingness & Trustworthiness: A Pair of Complementary Trust Measures in a Social Network	Atanu Roy (University of Minnesota - Twin Cities, United States) and Jaideep Srivastava (University of Minnesota, United States) and Jisu Huh (University of Minnesota, United States)
20	ClearView: Data Cleaning for Online Review Mining	Amanda Minnich (University of New Mexico, United States) and Noor Abu-El-Rub (University of New Mexico, United States) and Maya Gokhale (Lawrence Livermore National Lab, United States) and Ronald Minnich (Google Inc., United States) and Abdullah Mueen (University of New Mexico, United States)

Chairs: Keivan Kianmehr and Nima Dokoohaki
Room: -- Cypress/Monterey

1. A Platform for Identifying Experts and Paper Retrieval in Citation Networks, Qianwei Wang, Qianshan Yu and Xinyue Yu

2. Arguments and Interpretation in Big Social Data Analysis: A Survey of the ASONAM Community Candice Lanius, Candice Lanius

3. Gamification for Informal Terms Lexicon Building Fernando Henrique Calderon Alvarado.

4. Identifying the Impact of Friends on a Peers Academic Performance Philip Scanlon and Alan Smeaton.

5. Social Network of Software Development at GitHub William Leibzon.

6. BullyBlocker: Towards the Identification of Cyberbullying in Social Networking Sites -- Yasin Silva (Arizona State University, United States) and Christopher Rich (Arizona State University, United States) and Deborah Hall (Arizona State University, United States)

7. Learning Triadic Influence in Large Social Networks Chenhui Zhang (Tsinghua University, China) and Sida Gao (Tsinghua University, China) and Jie Tang (Tsinghua University, China)

8. Local Community Detection in Multilayer Networks -- Roberto Interdonato (Dept. Computer Engineering, Modeling, Electronics, and Systems Sciences, University of Calabria, Italy) and Andrea Tagarelli (Dept. Computer Engineering, Modeling, Electronics, and Systems Sciences, University of Calabria, Italy) and Dino Ienco (IRSTEA, UMR TETIS Montpellier, France) and Arnaud Sallaberry (LIRMM - Universite Paul Valery, France) and Pascal Poncelet (LIRMM - Universite de Montpellier, France)

9. Node-Centric Detection of Overlapping Communities in Social Networks Yehonatan Cohen (Ben-Gurion University Of The Negev, Israel) and Danny Hendler (Ben-Gurion University Of The Negev, Israel) and Amir Rubin (Ben-Gurion University Of The Negev, Israel)

10. Social Network Change Deection Using a Genetic Algorithm Based Back Propagation Neural Network Model -- Ze Li (College of Information System and Management, National University of Defense Technology, China) and Duo-Yong Sun (College of Information System and Management, National University of Defense Technology, China) and Jie Li (College of Information System and Management, National University of Defense Technology, China) and Zhan-Feng Li (College of Information System and Management, National University of Defense Technology, China)

11. Towards Predicting Academic Impact from Mainstream News and Weblogs: A Heterogenous Graph Based Approach Mohan Timilsina (Insight Centre for Data Analytics, National University of Ireland Galway, Ireland) and Brian Davis (Insight Centre for Data Analytics, National University of Ireland Galway, Ireland) and Conor Hayes (Insight Centre for Data Analytics, National University of Ireland Galway, Ireland)

12. Towards Sentiment Analysis for Mobile Devices -- Johnnatan Messias (Universidade Federal de Minas Gerais (UFMG), Brazil) and João P. Diniz (Universidade Federal de Minas Gerais (UFMG), Brazil) and Elias Soares (Universidade Federal de Minas Gerais (UFMG), Brazil) and Miller Ferreira (Universidade Federal de Minas Gerais (UFMG), Brazil) and Matheus Araújo (Universidade Federal de Minas Gerais (UFMG), Brazil) and Lucas Bastos (Universidade Federal de Minas Gerais (UFMG), Brazil) and Manoel Miranda (Universidade Federal de Minas Gerais (UFMG), Brazil) and Fabricio Benevenuto (Federal University of Minas Gerais (UFMG), Brazil)

13. Trivia Quiz Mining using Probabilistic Knowledge Taesung Lee (Yonsei University, Korea, Republic of) and Seung-Won Hwang (Yonsei University, Korea, Republic of) and Zhongyuan Wang (Microsoft, China)

Chairs: Keivan Kianmehr and Nima Dokoohaki
Room: -- Cypress/Monterey

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14. Troll Vulnerability in Online Social Networks -- Paraskevas Tsantarliotis (University of Ioannina, Greece) and Evaggelia Pitoura (Univ. of Ioannina, Greece) and Panayiotis Tsaparas (Univ. of Ioannina, Greece)

15. ARC: A Pipeline Approach Enabling Large-Scale Graph Visualization, Michael Ferron,Ken Q. Pu,Jaroslaw Szlichta

16. BullyBlocker: An App to Identify Cyberbullying in Facebook*, Yasin N. Silva,Christopher Rich,Jaime Chon,Lisa M. Tsosie

17. CredFinder: a Real-time Tweets Credibility Assessing System, Majed AlRubaian, Muhammad Al-Qurishi, Atif Alamri, Mabrook Al-Rakhami, Mohammad Mehedi Hassan

18. Finding Requests in Social Media for Disaster Relief, Tahora H. Nazer, Fred Morstatter, Harsh Dani, and Huan Liu

19. GiveMeExample: Learning Confusing Words by Example Sentences, Chieh-Yang, Huang, Lun-Wei, Ku

20. MIDAS: Mental Illness Detection and Analysis via Social Media, Elvis Saravia, Chun- Hao Chang, Renaud Jollet De Lorenzo, Yi-Shin Chen*

21. Polinode: A Web Application for the Collection and Analysis of Network Data, Andrew Pitts

22. POSN: A Privacy Preserving Decentralized Social Network App for Mobile Devices, Eric Klukovich, Esra Erdin, and Mehmet Hadi Gunes

23. PRO-Fit: Exercise with friends, Saumil Dharia, Vijesh Jain, Jvalant Patel, Jainikkumar Vora, Rizen Yamauchi,Magdalini Eirinaki, Iraklis Varlamis

24. VirtualIdentity: Privacy Preserving User Profiling, Sisi Wang, Wing-Sea Poon, Golnoosh Farnadi, Caleb Horst, Kebra Thompson, Michael Nickels, Anderson Nascimento, Martine De Cock

25. A Centrality-based Measure of User Privacy in Online Social Networks, Ruggero G. Pensa (University of Torino, Italy, Italy) and Gianpiero Di Blasi (University of Torino, Italy)

ASONAM 2016 Industrial Track – Program

Authors	Papers
Li Zhang, Liang Zhang, Keli Xiao and Qi Liu	Forecasting Price Shocks with Social Attention and Sentiment Analysis
Aaron Cahn, Scott Alfeld, Paul Barford and S Muthukrishnan	What's in the Community Cookie Jar?
Nikolaos Panagiotou, Ioannis Katakis, Dimitrios Gunopulos, Vana Kalogeraki, Elizabeth Daly, Jia Yuan Yu and Brendan O' Brien	Mining Hidden Constrained Streams in Practice: Informed Search in Dynamic Filter Spaces
Martin Fixman, Ariel Berenstein, Jorge Brea, Martin Minnoni, Matias Travizano and Carlos Sarraute	A Bayesian Approach to Income Inference in a Communication Network

Authors	Papers
Emmanuel Malherbe and Marie-Aude Aufaure	Bridge the Terminology Gap Between Recruiters and Candidates: A Multilingual Skills Base built from Social Media and Linked Data
Ruocheng Guo and Paulo Shakarian	A Comparison of Methods for Cascade Prediction
Qiang Ma, S. Muthukrishnan and Wil Simpson	App2Vec: Vector Modeling of Mobile Apps and Applications
Juan de Monasterio, Alejo Salles, Carolina Lang, Diego Weinberg, Martin Minnoni, Matias Travizano and Carlos Sarraute	Analyzing the Spread of Chagas Disease with Mobile Phone Data

ASONAM 2016 - Multidisciplinary Track – Program

SESSION	Authors	Title
S1 Applications of network analysis and social media analysis Room: Wine Salon Chair: Rosa Benito	Martin Atzmueller, Tom Hanika, Gerd Stumme, Richard Schaller and Bernd Ludwig	Social Event Network Analysis: Structure, Preferences, and Reality
	Jorge Alé Chilet, Cuicui Chen, Yusan Lin	Analyzing social media marketing in the high-end fashion industry using named entity recognition
	Leidys del Carmen Contreras Chinchilla, Kevin Andrey Rosales Ferreira	Analysis of the behavior of customers in the social networks using data mining techniques
	Mikel Joaristi, Edoardo Serra, Francesca Spezzano	Evaluating the Impact of Social Media in Detecting Health-Violating Restaurants
	S. Martin-Gutierrez∗, J. Borondo∗, A. J. Morales∗, J. C. Losada∗, A. M. Tarquis∗† and R. M. Benito∗	Agricultural activity shapes the mobility patterns in Senegal
S2 Network Analysis and applications to information and Knowledge Room: Wine Salon Chair: Maha Soliman	Alon Sela, Dmitri Goldenberg, Erez Shmueli, Irad Ben-Gal	Scheduled Seeding for Latent Viral Marketing
	Andrej Kastrin, Thomas C. Rindflesch, ,Dimitar Hristovski	Evolution of MEDLINE bibliographic database: preliminary results
	Benjamin D. Horne & Sibel Adalı, Kevin Chan	Impact of message sorting on access to novel information in networks
	Charisse Madlock-Brown et al.	The scientometrics of successful women in science
	Fabien Tarissan, Yannis Panagis and Urska Sadl	Selecting the cases that defined Europe: complementary metrics for a network analysis
	Maha Soliman, Olfa Nasraoui, Nigel G.F Cooper	Analysis and visualization of a literature-mined glaucoma interaction network
S3 Models and Methods for social media analysis Room: Wine Salon Chair: Nitin Agarwal	Giovannetti Romain and Luigi Lancieri	Model of computer architecture for online social network flexible data analysis
	Lakshika Balasuriya, Sanjaya Wijeratne, Derek Doran, Amit Sheth	Finding street gang members on twitter
	Linlin You,Bige Tuncer	Exploring public sentiments in places based on a crowd-calibrated sentiment analysis mechanism using geo-tagged social network messages
	Muhammad Hrishiah, Maytham Safar, Khaled Mahdi	Modeling Twitter as Weighted Complex Networks Using Retweets
	Narotam Singh, Sheetal Varshney, Amita Kapoor	Centrality measures in close group of adolescent females and their association with individual character strenghts
	Shachi H Kumar , Jay Pujara , Lise Getoor , David Maresy, Dipak Guptaz and Ellen Riloff	Unsupervised models for predicting strategic relation between organization

S4 Models and Methods for social media analysis 1 Room: Wine Salon Chair: Martin Atzmueller	Geetika Sarna and MPS Bhatia	A probabilistic approach to automatic extract new words from social media
	Luigi lancieri and Romain Giovanetti	Multilevel exploration in twitter social stream
	Tom Carrick, Awais Rashid, Paul J Taylor	Mimicry in online conversations: an exploratory study of linguistic analysis techniques
	Wei-Chung Wang, Lun-Wei Ku	Identifying chinese lexical inference using probabilistic soft logic
	Abdélilah Balamane, Rokia Missaoui, Léonard Kwuida and Jean Vaillancourt	Descriptive Group Detection in Two-mode Data Networks using Biclustering
S5 New Algorithms for Data Mining and Media Analysis Room: Wine Salon Chair: Rokia Missaoui	Hyunsouk Cho, Seung-won Hwang	ECO: Entity-level Captioning in Context
	Ilhem Feddaoui, Faîçal Felhi, Jalel Akaichi	EXTRACT: New extraction algorithm of association rules from frequent itemsets
	Izzat Alsmadi, Dianxiang Xu, Nitish Dhakal	Testing Assessment of Group Collaborations in OSNs
	Martin Atzmueller	Detecting community patterns capturing exceptional link trails
	Upul Senanayake, Mahendra Piraveenan	A memory-efficient heuristic for maximum matching in scale-free networks
	Zvi Lotker	The Tale of two clocks
S6 Social Media Analysis and Political Issues Room: Wine Salon Chair: Nima dokoohaki	Anh Dang, Mike Smit, Abidalrahman Moh'd, Rosane Minghim, and Evangelos Milios	Toward understanding how users respond to rumors in social media
	J. Borondo, A. J. Morales, J. C. Losada, and R. M. Benito	Analyzing the Usage of Social Media During Spanish Presidential Electoral Campaigns
	Linn Sandberg, Shatha Jaradat, Nima dokoohaki	The social media election agenda: Issue salience on Twitter during the European and Swedish
	Saud Alashri, Srinivasa Srivatsav Kandala, Vikash Bajaj, Roopek Ravi, Kendra L. Smith and Kevin C. Desouza	Analysis of sentiment on facebook during 2016 USA presidential election
	Serpil Tokdemir, Nitin Agarwal, Rolf T. Wigand.	Social Media, Spillover, and Saudi Arabian Women's right to drive movements: Analyzing interconnected online collective actions

August 18, 2016: Doctoral Forum and Posters

Session 1: Social Network Analysis and Society, 10:00 AM - 12:00 PM (30 minutes per talk, 25 minutes for talk + 5 minutes for Q&A)

Chairs' Opening remarks (10 minutes)

1. Huang Weiyue. Is it truly a 5-star Movie? Restoring the Movie's Truthful Rating
2. Srishti Gupta. Emerging Threats Abusing Phone Numbers Exploiting Cross-Platform Features
3. Elizabeth Williams. GeoContext: Discovering Geographical Topics from Social Media

Session 2: Fundamentals of Social Network Analysis, 3:30 PM - 5:20 PM (30 minutes per talk, 25 minutes for talk + 5 minutes for Q&A)

1. Fred Morstatter. Detecting and Mitigating Bias in Social Media
2. Muhammad Uddin. Noise Removal and Structured Data Detection to Improve Search for Personality Features
3. Benjamin Cabrera. Towards Using Subpattern Distributions in Social Network Analysis

Chairs' Closing remarks (10 minutes)

Poster Session -

Please refer to the main posters madness session for all posters.

FOSINT-SI 2016 Program

Friday, August 19	
07:30	Registration
08:30	ASONAM 2016 - Plenary 1 - Brian Uzzi, Northwestern University, USA
09:30	Coffee Break
09:50	Welcome and Opening (FOSINT-SI 2016)
10:00	**Session 1** **Chair:** David Skillicorn **Room:** Tudor C
Regular Paper	Spam Detection of Twitter Traffic: A Framework based on Random Forests and non-uniform feature sampling *Claudia Meda, Edoardo Ragusa, Christian Gianoglio, Rodolfo Zunino, Augusto Ottaviano, Eugenio Scillia and Roberto Surlinelli*
Regular Paper	Virtual Indicators of Sex Trafficking to Identify Potential Victims in Online Advertisements *Michelle Ibanez and Rich Gazan*
Regular Paper	Investigative Simulation: Towards Utilizing Graph Pattern Matching for Investigative Search *Benjamin Hung and Anura Jayasumana*
Short Paper	The Rise & Fall of #NoBackDoor on Twitter: the Apple vs. FBI Case *Samer Al-Khateeb and Nitin Agarwal*
12:00	Lunch Break
13:00	**Invited Keynote**
	Chair: Uwe Glässer
	Hugh Stevenson (Director, Criminal Intelligence Services Ontario) Heterogeneous Data Mining for Organized Crime Detection
14:00	**Session 2** **Chair:** Uwe Glässer **Room:** Tudor C
Best Paper	Argumentation Models for Cyber Attribution *Eric Nunes, Paulo Shakarian, Gerardo Simari and Andrew Ruef*
15:00	Coffee Break
15:30	ASONAM 2016 - Panel
Saturday, August 20	
07:30	Registration
08:30	ASONAM 2016 - Plenary 2 - Evimaria Terzi, Boston University, USA
09:30	Coffee Break
10:00	**Session 3** **Chair:** Paulo Shakarian **Room:** Tudor C
Regular Paper	Graph Analytics for Healthcare Fraud Risk Estimation *Karl Branting, Florence Reeder, Jeff Gold and Timothy Champney*
Regular Paper	Retweet Prediction Considering User's Difference as an Author and Retweeter *Syeda Firdaus, Chen Ding and Alireza Sadeghian*
Regular Paper	CyberTwitter: Using Twitter to generate alerts for Cybersecurity Threats and Vulnerabilities *Sudip Mittal, Prajit Das, Varish Mulwad, Anupam Joshi and Tim Finin*
Regular Paper	Hidden Social Networks Analysis by Semantic Mining of Noisy Corpora *Christophe Thovex*
12:00	Lunch Break
13:00	ASONAM 2016 - Plenary 3 - Lise Getoor, University of California, Santa Cruz, USA
14:00	Coffee Break

14:30	**Session 4**	**Chair:** Mohammad Tayebi	**Room:** Tudor C
Short Paper	Detecting Covert Sex Trafficking Networks in Virtual Markets *Michelle Ibanez and Dan Suthers*		
Short Paper	Temporal Analysis of Dark Web_Forum_Users *Andrew Park, Brian Beck, Darrick Fletcher, Patrick Lam and Herbert H. Tsang*		
Short Paper	Cyberbullying Detection Using Probabilistic Socio-Textual Information Fusion *Vivek Singh, Qianjia Huang and Pradeep Atrey*		
Short Paper	Understanding Alliance and Opposition Among Violent Groups *Quan Zheng and David Skillicorn*		
Short Paper	Detecting Sex Trafficking Circuits in the U.S. Through Analysis of Online Escort Advertisements *Michelle Ibanez and Rich Gazan*		

20 August 2016

Session 1 Recommendation Systems **Room: Tudor A-B** **Session Chair: Faruk Polat**	FriendRank: A Personalized Approach for Tweets Ranking in Social Networks	Min Li, Linfeng Luo, Lin Miao, Yibo Xue, Zhiyun Zhao* and Zhenyu Wang
	Personalized Recommendation for New Questions in Community Question Answering	Lin Wang*, Bin Wu, Juan Yang and Shuang Peng
	Time Preference aware Dynamic Recommendation Enhanced with Location, Social Network and Temporal Information	Makbule Gulcin Ozsoy, Faruk Polat* and Reda Alhajj
	An Intelligent Method for Optimization of Tariffs in GSM Networks	Buket Kaya*
	Big Data Mining of Social Networks for Recommended Friends	Fan Jiang and Carson Leung*

Session 2 Pattern Detection **Room: Tudor A-B** **Session Chair: Ismail Hakkı Toroslu**	Mining 'Following' Patterns from Big Sparse Social Networks	Edson Dela Cruz, Fan Jiang and Carson Leung*
	Frequent and Non-Frequent Pattern Detection in Big Data Streams: An Experimental Simulation in 1 Trillion Data Points	Konstantinos Xylogiannopoulos*, Panagiotis Karampelas* and Reda Alhajj*
	Mining Quad Closure Patterns in Instagram	Ahmet Anıl Müngen* Mehmet Kaya
	Co-Clustering Signed 3-Partite Graphs	Sefa Sahin Koc, Ismail Hakkı Toroslu*, Hasan Davulcu
	Classification of HIV data By Constructing A Social Network with Frequent Itemsets	Yunuscan Koçak, Tansel Özyer*, Reda Alhajj

21 August 2016

Session 3 Machine Learning Methods **Room: Tudor A-B** **Session Chair: Hasan Davulcu**	A New Topological Metric for Link Prediction in Directed, Weighted and Temporal Networks	Ertan Bütün*, Mehmet Kaya and Reda Alhajj
	Spectral Graph-Based Semi-supervised Learning for Imbalanced Classes	Quan Zheng and David Skillicorn*
	Proposing Good Fit job Candidate Algorithm (GFC-A) to Utilize Big Data and Career Data	Muhammad Fahim Uddin* Jeongkyu Lee
	Examining Place Categories for Link Prediction in Location Based Social Networks	Ahmet Engin Bayrak, Faruk Polat*

Session 4 Social Network Applications **Room: Tudor A-B** **Session Chair: Muhammad Fahim Uddin**	Spiral of Silence in Social Networks: A Data-driven Approach	Linfeng Luo, Min Li, Qing Wang, Yibo Xue, Chunyang Liu* and Zhenyu Wang
	On data collection, graph construction, and sampling in Twitter	Jeremy D. Wendt*, Randy Wells, Richard V. Field, Jr. Sucheta Soundarajan
	An Experimental Evaluation of Giraph and GraphChi	Junnan Lu* and Alex Thomo*
	A Privacy Weaving Pipeline for Open Big Data	Yu Yuan-Chih* and Dwen-Ren Tsai

HIBIB 2016 -- Program

HIBIB 2016 -- Session 1   Chair: Shang Gao   Room: Tudor C

Target Screening Neuroprotective Compounds with similar structure to Macromolecule Ginsenoside Rg1 from TCM by Molecular Docking and Molecular Imprint Technology	Qing-Shan Liu, Lina Yi and Xiaoying Yin
Study of transductive learning and unsupervised feature construction methods for biological sequence classification	Ana Stanescu, Karthik Tangirala and Doina Caragea
Understanding Crohn's disease patients reaction to Infliximab from Facebook: a medical perspective	Marco Roccetti, Paola Salomoni, Catia Prandi, Gustavo Marfia, Marco Montagnani and Linda Gningaye
Efficient Adverse Drug Event Extraction using Twitter Sentiment Analysis	Yang Peng, Melody Moh and Teng Moh

HIBIB 2016 -- Session 2   Chair: Ana Stanescu   Room: Tudor C

A Hybrid Statistical and Semantic Model for Identification of Mental Health and Behavioral Disorders using Social Network Analysis	Madan Krishnamurthy, Khalid Mahmood, Pawel Marcinek
A Personal Health Recommender System Incorporating Personal Health Records, Modular Ontologies, and Crowd-Sourced Data	Hengyi Hu, Adam Elkus, Larry Kerschberg
A Smart Phone Application in Improving Healthy Lifestyles and Health Outcomes for School-age Children with Asthma	Chia-Tung Wu, Yu-Fen Tzeng, Te-Wei Ho, Shyh-Wei Chen, Bih-Shya Gau, Feipei Lai, Hung-Yu Chiu
Mining Electronic Physical Records, A Trial	Wenyang Zou, Shang Gao and Xiaohui Wei

HIBIB 2016 -- Session 3   Chair: Khalid Mahmood   Room: Tudor C

Machine Learning Approach for Distinction of ADHD and OSA	K.-C. Chu, H.-J. Huang and Y.-S. Huang
A Fuzzy Model for Friendship Prediction in Healthcare Social Networks	Zeineb Dhouioui, Helmi Tlich, Radhia Toujeni and Jalel Akaichi

ABBREVIATION (for the Programme Overview) ARNO'S WORKSHOP

WORKING TITLE:

Hands on training on understanding and using Building Blocks and Successive Fractions search strategies in combination with Citation Pearl Growing to find academic data in a blink of the eye
Presenter:

Arno H.P. Reuser

Presenter BACKGROUND

o Founder and director Reuser's Information Services, 2008- .
o Founder and manager (ret.) Open Source Intelligence Branch, Defence Intelligence & Security Service, The Netherlands, 1998-2013

CONTENT:

Open Source Intelligence (OSINT) is a holistic approach to creating actionable intelligence for decision makers based on the analysis of public information that is retrieved from open sources. The OSINT process is based on the RIS Intelligence Cycle describing each individual step to build a solid information position and hence to produce intelligence.

The Internet / social media as an information source have many drawbacks and pitfalls making retrieving reliable information much more complex than is generally assumed. Most users start solving their information problems by using Google thus making four wrong assumptions: all required information is on the Internet, the Internet is the same as the WWW, searching Google is simple with all relevant hits on the first page, and Google has indexed everything on the WWW.

The workshop will demonstrate the most common pitfalls of using the Internet, address the assumptions, discuss the role of social media in forensics from a practitioners viewpoint, share tools (Scrapbook, Maltego, RIS QRS) and techniques for Mozilla Firefox to search much faster and more efficient, validate open source data and demonstrate search strategies Building Blocks and Successive Fractions in combination with Citation Pearl Growing to find exactly what you need and bring down millions of results to just a few hundred with high relevance.

This combined methodology, widely used in Open Source Intelligence, has proven to be ideal for building a good, reliable, solid information position for intelligence production.

DyNo 2016 Program

Chair: Giulio Rossetti, PhD

Thursday 18 August 2016

Session 1   Chair: Giulio Rossetti

13:00-13:10

Opening Remark

13:10-13:30

Anita Zakrzewska and David A. Bader

Aging Data in Dynamic Graphs: A Comparative Study

13:30-13:50

Pascal Held and Rudolf Kruse

Detecting Overlapping Community Hierarchies in Dynamic Graphs

13:50-14:10

Kuntal Dey, Sahil Agrawal, Rahul Malviya and Saroj Kaushik

Assessment of Effectiveness of Content Models for Approximating Twitter Social
Connection Structures

14:10-14:30

Alireza Hajibagheri, Gita Sukthankar and Kiran Lakkaraju

A Holistic Approach for Predicting Links in Coevolving Multilayer Networks

14:30-14:50

Aaron Schecter

Modeling the Joint Dynamics of Relational Events and Individual States

Session 2   Chair: Giulio Rossetti

15:30-15:50

Paolo Cintia, Michele Coscia and Luca Pappalardo

The Haka Network: Evaluating Rugby Team Performance with Dynamic Graph

Analysis

15:50-16:10

Federico Musciotto, Saverio Delpriori, Paolo Castagno and Evangelos Pournaras

Mining Social Interactions in Privacy-preserving Temporal Networks

16:10-16:30

Xavier Bost, Vincent Labatut and Georges Linarès

Narrative smoothing: dynamic conversational network for the analysis of

TV Series plots

16:30-16:40

Closing Remark

MSNDS 2016 Program

Chair: Prof. I-Hsien Ting, Prof. Min-Yuh Day, Dr. Ming-Tai Wu

Thursday 18 August 2016

Session 1　　　　　　　　　　**Chair:** Prof. I-Hsien Ting

13:00-13:10

Opening Remark

13:10-13:30

K.-C. Chu and C.-C. Yeh

Knowledge flow of biomedical informatics domain: position-based co-citation analysis approach

13:30-13:50

Min-Yuh Day and Chia-Chou Lee

Deep Learning for Financial Sentiment Analysis on Finance News Providers

13:50-14:10

Min-Yuh Day and Wei-Chun Chuang

The Effect of Customer Perceived Value on Relationship Quality Between Illustrator and Fans to Recommendation on Facebook

14:10-14:30

Juan Yang, Mengxin Li, Bin Wu and Chenyang Xu

Forming a Research Team of Experts in Expert-Skill Co-occurrence network of Research News

14:30-14:50

María Óskarsdóttir, Cristián Bravo, Wouter Verbeke, Carlos Sarraute, Bart Baesens and Jan Vanthienen

A Comparative Study of Social Network Classifiers for Predicting Churn in the Telecommunication Industry

Session 2　　　　　　　　　　**Chair:** Prof. I-Hsien Ting

15:30-15:50

Heng-Shiou Sheu, Yi-Chung Chen and Don-Lin Yang

A Novel Approach for m-representative Skyline Query

15:50-16:10

Chih-Chien Wang, Min-Yuh Day and Yu-Ruei Lin

Toward Understanding the Cliques of Opinion Spammers with Social Network Analysis

16:10-16:30

Kamil Topal and Gultekin Ozsoyoglu

Movie Review Analysis: Emotion Analysis of IMDb Movie Reviews

16:30-16:50

Arijit Chatterjee and William Perrizo

Investor Classification and Sentiment Analysis

16:50-17:00

Closing Remark

SNAA 2016 Workshop (Thursday 18 August 2016)

08:00-09:30   SNAA 2016 – S1 (Tudor A-B)
09:30-10:00   Coffee Break
10:00-12:00   SNAA 2016 – S2 (Tudor A-B)
12:00-13:00   Lunch

Each author will have 25 minutes for the presentation and Q&A session.

SNAA – S1

Time: 08:00-9:30, **Chair:** Katarzyna Musiał-Gabryś, **Room:** Tudor A-B

- Piotr Bródka and Katarzyna Musiał-Gabryś **Introduction**
- Julian Fares and Kon Shing Kenneth Chung - **Personal Networks and Perception of Care**
- Michał Weskida and Radosław Michalski - **Evolutionary Algorithm for Seed Selection in Social Influence Process**
- Ashwin Bahulkar, Boleslaw Szymanski, Omar Lizardo, Nitesh Chawla, Yuxiao Dong and Yang Yang - **Analysis of Link Formation, Persistence and Dissolution in NetSense Data**

SNAA – S2

Time: 10:30-12:30, **Chair:** Piotr Bródka, **Room:** Tudor A-B

- Chulaka Gunasekara, Kishan Mehrotra and Chilukuri Mohan - **Improving the Robustness of the Smart Grid using a Multi-Objective Key Player Identification Approach**
- Ashley Farrugia, Rob Claxton and Simon Thompson - **Towards Social Network Analytics for Understanding and Managing Enterprise Data Lakes**
- Fei Gao and Katarzyna Musial - **Hybrid Link Prediction Model**
- Brian Crawford, Ralucca Gera, Ryan Miller and Bijesh Shrestha - **Community Evolution in Multiplex Layer Aggregation**
- Piotr Bródka and Katarzyna Musiał-Gabryś **SNAA Closing and the Best Paper Award Winner Presentation**

SNAST 2016 Program

Chairs: Panagiotis Karampelas, Thirimachos Bourlai

Thursday 18 August 2016

Session 1   **Chair:** Thirimachos Bourlai

08:00-08:10
Opening Remark
08:10-08:50
Prof. Didier Meuwly, University of Twente, Netherlands Forensic Institute
Keynote Speech
08:50-09:10
Xuan Xu, Michael Martin and Thirimachos Bourlai
Automatic Tattoo Image Registration System
09:10-09:30
Antwan Clark
Dynamic Prediction and Estimation of Intentional Failures in HPCs

Session 2   **Chair:** Thirimachos Bourlai

10:00-10:20
Yifang Wei and Lisa Singh
Identification of Extremism on Twitter
10:20-10:40
Sophie Baillargeon, Simon Hallé and Christian Gagné
Stream Clustering of Tweets
10:40-11:00
Andreas Xenaros, Panagiotis Karampelas and Ioanna Lekea
Profiling individuals based on email analysis and ego networks - A Visualization
Technique
11:00-11:20
Mauro Coletto, Chiara Renso, Franco Maria Nardini and Cristina Ioana Muntean
Sentiment-enhanced multidimensional analysis of online social networks: Perception
of the Mediterranean refugees crisis
11:20-11:40
Neeru Narang and Thirimachos Bourlai
On the Effectiveness of Statistical Hypothesis Testing in Infrared-based Face
Recognition in Heterogeneous Environments

SI 2016

Workshop on **Social Influence**

Welcome to SI 2016, the Workshop on Social Influence.
The workshop will be held in **San Francisco**, CA, USA in conjunction with the 2016 IEEE/ACM International
Conference on Advances in Social Networks Analysis and Mining (ASONAM 2016) on 18th August 2016.

8:00-8:20	Welcome to WOSINF (organizers) **Chairs: Paulo Shakarian & Radoslaw Michalski**
8:20-8:40	Toward Understanding Spatial Dependence on Epidemic Thresholds in Networks
	Zesheng Chen, Indiana University - Purdue University Fort Wayne
8:40-9:00	Observations on the role of influence in the difficulty of social network control
	Dave Mckenneyÿand Tony White, Carleton University
9:00-9:20	Estimating Influence of Social Media Users from Sampled Social Networks
	Kazuma Kimura, University of Tsukuba
9:20-9:40	Stability of Certainty and Opinion in Influence Networks
	Ariel Webster, Bruce Kapron University of Victoria
9:40-10:00	Influential User Detection on Twitter: Analyzing Effect of Focus Rate
	Zeynep Zengin Alp, Istanbul Technical University
10:00-10:30	BREAK
10:30-11:30	KEYNOTE: On (Influence) War
	Tim Hwang, Pacific Social
11:30-11:50	An Empirical Evaluation Of Social Influence Metrics
	Ruocheng Guo, Arizona State University
11:50-12:00	Conclusion (organizers)