# Program of ASONAM 2023 - FAB 2023 - FOSINT-SI 2023, HI-BI-BI 2023 and Workshops

All times in Turkish time - GMT+3

No	vem	her	06th

	Pergamon	Prienne	Miletus	Royal		
	MSNDS 2023 W Session I	PhD Track I				
09:00 - 11:00	Chair: I-Hsien Ting	Chair: Malek Malkawi	SIdEWayS 2023	Tutorial I		
11:00 – 11:30		Coffee Bre	ak			
	MSNDS 2023 W Session II	PhD Track II				
11:30 - 13:30	Chair: Min-Yu Day	Chair: Taleb Albrijawi	SIdEWayS 2023	Tutorial II -Part I		
13:30 – 14:30		Lunch Brea	ak -			
	Demos	PhD Track III				
14:30 - 16:30	Chair: Mehmet Kay	Chair: Ziad Algammal	Tutorial III	Tutorial II -Part II		
16:30 – 17:00		Coffee Bre	ak	•		
	Royal Hall: Keynote I: Hanghang Tong, University of Illinois at Urbana-Champaign, USA					
17:00 – 18:00		Chair: Nitin Agarwal				
19:30 – 21:30		Dinner Reception -	Royal Hall			

#### November 07th

	Royal	Pergamon	Prienne	Miletus
08:30 - 09:00		Opening Remaks fro	m organizers	
	Royal Hall	l: Keynote II: Prof. Mauro B	arni, University of Siena	, Italy
09:00 - 10:00		Chair: Ouhbi E	Brahim	-
10:00 – 10:30		Coffee Bre	ak	
	Research - 1a (3R+1S)	Research - 1b (2R+2S)	Industrial Track I	FAB I
10:30 - 12:30	Chair: Peixian Zhang	Chair: Chia-Hui Chang	Chair: Reyhan Pak	Chair: Mehmet Kaya
12:30 - 13:30		Dinner Reception -	Royal Hall	
	Research - 2a (2R+2S)	Research - 2b (2R+2S)	Industrial Track II	FAB II
13:30 - 15:30	Chair: Gheida Shahrour	Chair: Charles C Zhou	Chair: Malek Malkawi	Chair: Buket Kaya
15:30 – 16:30		Coffee Bre	ak	
	Research - 3a (1R+4S)	Research - 3b (2R+4S)	Multidisciplinary T1	FOSINT-SI I
16:30 – 18:50	Chair: Mert Cakmak	Chair: Nazar Akrami	Chair: Deniz Bestepe	Chair: Joel Brynielsson
19:30 - 21:00		Dinner		•

## November 08th

	Royal	Pergamon	Prienne	Miletus	
	Research - 4a (3R)	Research - 4b (3R)	Multidisciplinary T2	FOSINT-SI II	
09:00 - 11:00	Chair: Osmar Zaiane	Chair: Hessam Kavah	Chair: Ankit K Verma	Chair: Gozde Yartdas	
11:00 – 11:30		Coffee Bre	ak		
	Research - 5a (3R)	Research - 5b (1R+3S)	Research - 5c (1R+3S)	HIBIBI I	
11:30 - 13:30	Chair: B. Krishna Thota	Chair: I-Hsien Ting	Chair: Min-Yu Day	Chair: Loubaba Alhajj	
13:30 – 14:30		Lunch Bre	ak		
	Research - 6a (2R+2S)		Research - 6c (6S)	HIBIBI II	
14:30 - 16:30	Chair: Shwetha Srikanta		Chair: Rajesh Sharma	Chair: Sahar Taneera	
16:30 - 17:00		Coffee Bre	ak		
17:00 – 18:00	, ,	Royal Hall: Keynote III: Prof. Aawatif HAYAR, Minister of Solidarity, Social Inclusion and Family, President of University Hassan II Casablanca, Morocco (Springer - SNAM Journal Keynote) Chair: Fakhri Karray			
18:00 – 18:30	Closing Remaks from organizers -Royal Hall				
19:00 – 21:00		Banquet + Awards Cerer	mony - Royal Hall		

## November 09th

Tour to Pamukkale from 7:00 AM to about 8:00 PM

Click here for the location on the MAP

07:00 - 20:00

Sessions	Authors	Paper Title	Туре	Time-Slot
ormals I	Nur Dean and George Nakashyan	Popularity-Based Approach to Promote Cooperation in The Prisoner's Dilemma Game	Full	30
1a (3R+1S s/Social Nc	Bhargav Krishna Thota and Xiaoqing Liu	Assessing Impact of Social Network on Formation of Opinions in Integrated Intelligent Argumentation with Social Network	Full	30
Research - 1a (3R+1S) Opinion/Dynamics/Social Normals I	Alireza Mohammadinodooshan, William Holmgren, Martin Christensson and Niklas Carlsson	A Clone-based Analysis of the Content-Agnostic Factors Driving News Article Popularity on Twitter	Full	30
RoOpinion	Raed Alharbi and My T. Thai	Analyzing the Dynamics of Social Norms: Positive vs Negative Emergence	Short	20
s) rmals II	Ashwin Rao, Fred Morstatter and Kristina Lerman	Retweets Amplify the Echo Chamber Effect	Full	30
Research - 2a (2R+2S) Opinion/Dynamics/Social Normals II	Faisal Alatawi, Paras Sheth and Huan Liu	Quantifying the Echo Chamber Effect: an Embedding Distance-based Approach	Full	30
	Yanna Ding, Jianxi Gao and Malik Magdon- Ismail	Learning Network Dynamics from Steady States	Short	20
} Opinio	Ismail Hossain, Sai Puppala, Md Jahangir Alam and Sajedul Talukder	A Visual Approach to Tracking Emotional Sentiment Dynamics in Social Network Commentaries	Short	20

Sessions	Authors	Paper Title	Туре	Time-Slot
(3	Omar Hammad, Md. Rezwanur Rahman, Nicholas Clements, Shelly Miller, Shivakant Mishra and Esther Sullivan	PureNav: A Personalized Navigation Service for Environmental Justice Communities Impacted by Planned Disruptions	Full	30
Research - 1b (2R+2S) Social Good I	Hussain Otudi, Shelly Gupta, Nouf Albarakati and Zoran Obradovic	Classifying Severe Weather Events by Utilizing Social Sensor Data and Social Network Analysis	Full	30
Research - Social	Sultan Ahmed, Md Jahangir Alam, Sajedul Talukder and Ismail Hossain	Toward Addressing Identity Fraud in Social Media Users using Bangla Text-Based Gender Recognition	Short	20
œ e	Hafiz Budi Firmansyah, Jose Luis Fernandez- Marquez, Mehmet Oguz Mulayim, Jorge Gomes and Valerio Lorini	Empowering Crisis Response Efforts: A Novel Approach to Geolocating Social Media Images for Enhanced Situational Awareness	Short	20
((	Sofia Hurtado and Radu Marculescu	Quarantine in Motion: A Graph Learning and Multi-Agent Reinforcement Learning Framework to Reduce Disease Transmission Without Lockdown	Full	30
Research - 2b (2R+2S) Social Good II	Shing Yeung and Mahendra Piraveenan	Agent based network modelling of COVID-19 disease dynamics and vaccination uptake in a New South Wales Country Township	Full	30
	Weiyi Wang and Mahendra Piraveenan	SeCoNet: A Heterosexual Contact Network Growth Model for Human Papillomavirus Disease Simulation	Short	20
<u>"</u>	Nishant Vishwamitra, Keyan Guo, Song Liao, Jaden Mu, Zheyuan Ma, Long Cheng, Ziming Zhao and Hongxin Hu	Understanding and Analyzing COVID-19-related Online Hate Propagation Through Hateful Memes Shared on Twitter	Short	20

Sessions	Authors	Paper Title	Туре	Time-Slot
	Siddharth Jaiswal, Ankit Kumar Verma and Animesh Mukherjee	Auditing Gender Analyzers on Text Data	Full	30
3a (1R+4S) airness	M. Diaoulé Diallo and Tobias Hecking	Privacy-Preserving Vital Node Identification in Complex Networks: Evaluating Centrality Measures under Limited Network Information	Short	20
, <u>L</u>	Paula Reyero Lobo, Joseph Kwarteng, Mayra Russo, Miriam Fahimi, Kristen Scott, Antonio Ferrara, Indira Sen and Miriam Fernandez	NoBIAS 2023 Data Challenge: A Multidisciplinary Lens of Bias in Hate Speech	Short	20
Research Bias/	Evaggelia Pitoura and Konstantinos Manolis	Modularity-Based Fairness in Community Detection	Short	20
	Jad Doughman, Shady Shehata and Fakhri Karray	FairGauge: A Modularized Evaluation of Bias in Masked Language Models	Short	20
	Shreya Ghosh and Prasenjit Mitra	Tweeted Truth vs Fiction: Dissecting Vaccination Misinformation on Twitter	Full	30
+4S) News	Keshopan Arunthavachelvan, Shaina Raza and Chen Ding	PLNCC: Leveraging New Data Features for Enhanced Accuracy of Fake News Detection	Short	20
- 3b (2R+4S) on/Fake New	Muhammad Abulaish, Anuj Saraswat and Mohd Fazil	A Multi-Task Learning Framework using Graph Attention Network for User Stance and Rumor Veracity Prediction	Short	20
Research - 3b (2R+4S) sinformation/Fake News	Peixian Zhang, Ehsan-Ul Haq, Yiming Zhu, Pan Hui and Gareth Tyson	Echo Chambers within the Russo-Ukrainian War: The Role of Bipartisan Users	Short	20
M. S.	Chia-Hui Chang and Yu-Yen Ting	Improving Chinese Fact Checking via Prompt Based Learning	Short	20
Sessions	Authors	Paper Title	Туре	Time-Slot

(3R) ng l	Gustav Nikopensius, Mohit Mayank, Orchid Chetia Phukan and Rajesh Sharma	Reinforcment Learning-based Knowledge Graph Reasoning for Explainable Fact-checking	Full	30
_ ~ W	Simon Delarue, Tiphaine Viard and Jean-Louis Dessalles	Unexpected Attributed Subgraphs: a Mining Algorithm	Full	30
Rese	Joseph Kwarteng, Tracie Farrell, Aisling Third and Miriam Fernandez	Annotators' Perspectives: Exploring the Influence of Identity on Interpreting Misogynoir	Full	30
(3R) tion and	Yashar Talebirad, Mohammadmahdi Zafarmand, Osmar Zaiane and Christine Largeron	USIWO: A Local Community Search Algorithm for Uncertain Graphs	Full	30
Research - 4b (3R) Community Detection and Analysis I	Isabel Murdock, Kathleen M. Carley and Osman Yagan	An Agent-Based Model of Reddit Interactions and Moderation	Full	30
Rese	Rima Hazra, Debanjan Saha, Amruit Sahoo, Somnath Banerjee and Animesh Mukherjee	Duplicate Question Retrieval and Confirmation Time Prediction in Software Communities	Full	30
(3R) ng II	Xueying Liu, Zhihao Hu, Xinwei Deng and Chris Kuhlman	Learning Common Knowledge Networks Via Exponential Random Graph Models	Full	30
Research - 5a (3R) Graph Learning II	Seonhyeong Kim, Irshad Khan and Young-Woo Kwon	Disaster Detection through GNN Models using Disaster Knowledge Graphs	Full	30
Rese	Aming Wu and Young-Woo Kwon	AD-TIN: Edge Anomaly Detection for Temporal Interaction Networks using Multi-representation Attention	Full	30

Sessions	Authors	Paper Title	Туре	Time-Slot
(8)	George Panagopoulos, Nikolaos Tziortziotis, Fragkiskos Malliaros and Michalis Vazirgiannis	Maximizing Influence with Graph Neural Networks	Full	30
Research - 6a (2R+2S) Graph Learning III	Saket Gurukar, Shaileshh Bojja Venkatakrishnan, Balaraman Ravindran and Srinivasan Parthasarathy	PolicyClusterGCN: Identifying Efficient Clusters for Training Graph Convolutional Networks	Full	30
ssearch - Graph Le	Harry Shomer, Wei Jin, Juanhui Li, Yao Ma and Hui Liu	Learning Representations for Hyper-Relational Knowledge Graphs	Short	20
Re	Shoval Frydman and Yoram Louzoun	FODGE - Fast Online Dynamic Graph Embedding	Short	20
+3S) d Analysis	Hitkul Jangid, Tanisha Pandey, Sonali Singhal, Pranjal Kandhari, Aryamann Tomar and Ponnurangam Kumaraguru	Together Apart: Decoding Support Dynamics in Online COVID-19 Communities	Full	30
5b (1R tion an	Yiping Liu, Yan Bo, Bo Zhao and Hongyi Su	Efficient size-prescribed k-core search	Short	20
Research - unity Detec	Jiarui Wang, Xiaoyun Wang, Chun-Ming Lai and S. Felix Wu	ONLINE SOCIAL COMMUNITY SUB-LOCATION CLASSIFICATION	Short	20
Re	Elyazid Akachar, Yahya Bougteb, Meriem Adraoui, Brahim Ouhbi and Bouchra Frikh	NI-MLA: Node Importance based Multi-level Label Assignment strategy for community detection in social graphs.	Short	20

Sessions	Authors	Paper Title	Type	Time-Slot
	Mohammed Afaan Ansari, Vivek Kumar Mandal, Jiten Sidhpura and Ashiqur Khudabukhsh	Quantifying the Transience of Web Datasets	Full	30
(1R+3S) Itions I	Sachin Thukral, Suyash Sangwan, Vipul Chauhan, Arnab Chatterjee and Lipika Dey	Generating insights about financial asks from Reddit posts and user interactions	Short	20
Research - 5c (1R+3S) Web Applications I	Florian Steuber, Sinclair Schneider, João Schneider and Gabi Dreo Rodosek	Real-Time Anomaly Detection and Popularity Prediction for Emerging Events on Twitter	Short	20
Resea	Md Rayhanul Masud, Ben Treves and Michalis Faloutsos	GeekMAN: Geek-oriented username Matching Across online Networks	Short	20
	Abduljaleel Al Rubaye and Gita Sukthankar	How Popularity Shapes User Interaction in Tech-Related Online Communities	Short	20
	Siyi Guo, Zihao He, Ashwin Rao, Eugene Jang, Yuanfeixue Nan, Fred Morstatter, Jeffrey Brantingham and Kristina Lerman	Measuring Online Emotional Reactions to Offline Events	Short	20
(S) = 0	Ehsan Ul Haq, Yiming Zhu, Zijun Lin, Haodi Weng, Gareth Tyson, Lik Hang Lee, Reza Hadi Mogavi, Tristan Braud and Pan Hui	Understanding Characteristics of Catalyst Users in the WallStreetBets Community	Short	20
- 6c (6	Shintaro Ueki, Fujio Toriumi and Toshiharu Sugawara	User's Position-Dependent Strategies in Consumer-Generated Media with Monetary Rewards	Short	20
Research - 6c (6S) Web Applications II	Gheida Shahrour, Ed De Quincey and Sangeeta Lal	The Content Quality of Crowdsourced Knowledge on Stack Overflow- A Systematic Mapping Study	Short	20
	Dang Pham and Tuan Le	Utilizing Textual Reviews for Visualizing and Understanding User Preferences	Short	20
	Max-Emanuel Keller, Alexander Döschl, Peter Mandl and Alexander Schill	Towards an adaptive algorithms selection on predicting the update interval for social media feeds	Short	20

Sessions	Authors	Paper Title	Туре	Time-Slot
	Keshava Pallavi Gone and Michael Smit	Designing a Natural Language Processing System to Support Social Science Research	Full	30
PHD Track I	Alexander Shevtsov, Despoina Antonakaki, Ioannis Lamprou, Ioannis Kontogiorgakis, Polyvios Pratikakis and Sotiris Ioannidis	Russo-Ukrainian War: Prediction and explanation of Twitter suspension	Full	30
PHD	Kirti Jain, Vasudha Bhatnagar and Sharanjit Kaur	Modeling Behavioral and Epidemic Dynamics in Social Contact Networks	Full	30
	Ahmad Hassanpour, Masrur Masqub Utsash and Bian Yang	The Impact of Linkability On Privacy Leakage	Full	30
	Mohamad Elhadi Abushofa, Amir Atapour Abarghouei, Matthew Forshaw and A. Stephen McGough	FEGR: Feature Enhanced Graph Representation Method for Graph Classification	Full	30
PHD Track II	Nathan Bartley, Keith Burghardt and Kristina Lerman	Evaluating Content Exposure Bias in Social Networks	Full	30
PHD -	Ahmed Aly, Dina Nawara and Rasha Kashef	ROBUREC: Building a Robust Recommender using Autoencoders with Anomaly Detection	Full	30
	James Stevenson, Matthew Edwards and Awais Rashid	Analysing The Activities Of Violent Far-Right Extremists On The Parler Social Network	Full	30
	Tim Faverjon and Pedro Ramaciotti	Discovering ideological structures in representation learning spaces in recommender systems on social media data	Full	30
= ≠	Natalia Meshcheryakova and Sergey Shvydun	Perturbation Analysis of Centrality Measures	Full	30
PHD Track III	Anjan Chowdhury, Swarup Chattopadhyay and Kuntal Ghosh	Analyzing the Progression of Alzheimer's Disease in Human Brain Networks	Full	30
T d	Haris Bin Zia, Ehsan Ul Haq, Ignacio Castro, Pan Hui and Gareth Tyson	An Analysis of Twitter Discourse on the War Between Russia and Ukraine	Full	30
	Braully Silva, Erika Coelho, Hebert Coelho and Fábio Protti	A Greedy Heuristic for Majority Target Set Selection in Social Networks	Full	30

Sessions	Authors	Paper Title	Type	Time-Slot
	Yidan Sun and Mayank Kejriwal	DeepGraph: Multi-Cluster Interactive Visualization of Complex Networks in a Learned Representation Space	Short	15
	Kashfia Sailunaz, Gabi Jurca, Deniz Bestepe, Busra Karatay, Lama Alhajj, Tansel Ozyer, Jon Rokne, Reda Alhajj	KoExPubMed: A Tool for Effective and Customized Knowledge Extraction from PubMed	Short	15
a ck	Enrique Gomicia-Murcia, Muhammad Al-Qurishi and Riad Souissi	pyStudio: An Open-Source Machine Learning Platform	Short	15
Demo Track	John Ziegler, Johannes Sindlinger, Marina Walther and Michael Gertz	TrendTracker: Temporal, network-based exploration of long-term Twitter trends	Short	15
Ğ	Trisha Singhal, Junhua Liu, Wenchuan Mu, Lucienne T. M. Blessing and Kwan Hui Lim	Photozilla: An Image Dataset of Photography Styles and its Application to Visual Embedding and Style Detection	Short	15
	Mehrdad Jalali and Christof Wöll	Materials Property Exploration through Social Network Analysis: A Case Study on Metal-Organic Frameworks	Short	15
	Ishmam Solaiman and Nitin Agarwal	Multiagent-based Youtube Content Discovery Bot	Short	15

multidisciplinary Track	disciplinary Track	Ahmed F. M. Fahmy, Etienne Gael Tajeuna and Mohamed Bouguessa	Tracking User Sentiment Changes on Social Networks	Full	30
		Abeer Khan, Maria Hunaid Samiwala, Abeeha Zawar, Shah Jamal Alam and Qasim Pasta	Exploring the Role of Network Centrality in Player Selection: A Case Study of Pakistan Super League	Full	30
		Toshi-Hiro Ito and Hiroaki Shiokawa	An Effective Graph-based Music Recommendation Algorithm for Automatic Playlist Continuation	Full	30
	multic	Kenji Yokotani, Takano Masanori Takano and Nobuhito Abe	Abnormal behavior of following peers in an online game indicates bipolar disorder and manic/hypomanic episodes	Full	30
multidisciplinary Track	ultidisciplinary Tr	Mehrdad Jalali	The Materials Galaxy: A Social Network Analysis Approach to Uncovering Materials Properties	Full	30
		Zvi Lotker	The Art of Active Listening	Full	30
		Ben Cohen and Ian Mcculloh	Fragile Minds: Exploring the Link Between Social Media and Young Adult Mental Health	Full	30
		Theresa Migler, Galen Borgman, Harumi Hokari and Noah Otsuka	Park Usage Disparity During the Covid-19 Pandemic	Full	30

Sessions	Authors	Paper Title	Туре	Time-Slot
	Ben Treves, Md Rayhanul Masud and Michalis Faloutsos	RURLMAN: Matching Forum Users Across Platforms Using Their Posted URLs	Full	30
Industrial Track I	Abdulaziz Alhamadani, Khadija Althubiti, Shailik Sarkar, Jianfeng He, Lulwah Alkulaib, Srishti Behal, Mahmood Khan and Chang-Tien Lu.	From Guest to Family: An Innovative Framework for Enhancing Memorable Experiences in the Hotel Industry	Full	30
snpi	Nikki Gupta and Prakash Mandayam Comar	Quantifying customer interactions on ML optimized page layouts	Full	30
드	Lylia Abrouk, Hamza Chergui and Hamid Ahaggach	OntoFiC : an ontology for financial fraud detection and customer behavior modeling	Full	30
ac <del>k</del>	Shwetha Koushik Manchinahalli Srikanta, Katie L. Pierce, Joshua E. Introne, Chilukuri K. Mohan and Sucheta Soundarajan	Structure and Dynamics of a Charitable Donor Co-Attendance Network	Full	30
a T	Lulwah Alkulaib, Abdulaziz Alhamadani, Shailik Sarkar and Chang-Tien Lu	Hypergraph Text Classification for Mental Health Misleading Advice	Full	30
Industrial Track II	Abiola Akinnubi, Nitin Agarwal, Mustafa Alassad and Jeremiah Ajiboye	Knowledge Graph Embedding for Topical and Entity Classification in Multi-Source Social Network Data	Full	30
<u> </u>	Shengkun Wang, Yangxiao Bai, Kaiqun Fu, Linhan Wang, Chang-Tien Lu and Taoran Ji	ALERTA-Net: A Temporal Distance-Aware Recurrent Networks for Stock Movement and Volatility Prediction	short	20
Sessions	Authors	Paper Title	Type	Time-Slot
	Laura Lalondre, Zineb Farahat, Nabila Zrira, Kamal Marzouki, Azar Abdeljelil, Mohamed Hannat, Ikhlass Serraji, Wassim Joualla, Imane Hilal, Ibtissam Benmiloud, Nabil Ngote and Kawtar Megdiche	On the Use of Modeling, 3D Reconstruction, and 3D Printing Methods to Improve Simulation-Based Training in Cardiology	Full	30
=	Gozde Yurtdas, Loubaba Alhajj, Kashfia Sailunaz, Tansel Ozyer, Jon Rokne, Reda Alhajj	Creating a Learning Profile by Using Face and Emotion Recognition	Full	30
HI-BI-BI	Layla Bouzoubaa, Jordyn Young and Rezvaneh Rezapour	Exploring the Landscape of Drug Communities on Reddit: A Network Study	Full	30
I I	Mailys Payen, Zineb Farahat, Nabila Zrira, Adnan Anouzla, Bahia El Abdi, Zakaria Tlemsani, Ibtissam Benmiloud, Imane Hilal, Rawane Elhadiq, Nabil Ngote and Kawtar Megdiche	Towards an Improved Ureteroscopies Care through the Use of 3D Printing Techniques of Simulators	Full	30
	Simone Branchetti and Marco Roccetti	Large-scale Sporting Events and the Spread of COVID-19 in USA: The Case of the 2021 NFL Superbowl, in Tampa, FL	short	20

Sessions	Authors	Paper Title	Type	Time-Slot
	Kazi Tabassum Ferdous, Sowmya Balasubramanian, Venkatesh Srinivasan and Alex Thomo	Brain network similarity using k-cores	Full	30
=	Nikolaos Amvazas, Spyridon Moschopoulos, Kyriakos Koritsoglou, Giorgos Tatsis, Ioannis Fudos and Dimitrios Tzovaras	Introducing a high-accuracy brain-computer interface (BCI) for intelligent wheelchairs	Full	30
	Reyhan Zeynep Pek, Muhammed Talha Zavalsiz, Melis Serdar, Lama Alhajj, Sleiman Alhajj, Kashfia Sailunaz, Tansel Ozyer, Jon Rokne, Reda Alhajj	Investigating The Roles of microRNAs / IncRNAs in Characterizing Breast Cancer Subtypes and Prognosis	Full	30
	Nouhaila Erragzi, Nabila Zrira, Anwar Jimi, Ibtissam Benmiloud, Rajaa Sebihi and Nabil Ngote	US-Net: A Breast Ultrasound Image Segmentation using Deep Learning	Full	30

		Priyanka Ranade and Anupam Joshi. FABULA	Intelligence Report Generation using Retrieval-Augmented Narrative Construction	Full	30
	FOSINT-SI I	Joel Brynielsson, Mika Cohen, Patrik Hansen, Samuel Lavebrink, Madeleine Lindström and Edward Tjörnhammar	Comparison of Strategies for Honeypot Deployment	Full	30
		Lisa Kaati, Amendra Shrestha and Nazar Akrami Linguistic Alignments	Detecting Similarities in Language Use in Written Communication	Full	30
		Lisa Kaati, Arvin Moshfegh, Kevin Lindén, Amendra Shrestha and Nazar Akrami	Harmful Communication. Detection of Toxic Language and Threats on Swedish	Full	30
		Shadi Shajari, Mustafa Alassad and Nitin Agarwal	Characterizing Suspicious Commenter Behaviors	Full	30
	≡	Md Jahangir Alam, Ismail Hossain, Sai Puppala and Sajedul Talukder	Combatting Identity Attacks in Online Social Networks: A Multi-Layered Approach Using Zero-Knowledge Proof and Private Blockchains	Full	30
	-OSINT-SI	Esraa Aldreabi and Jeremy Blackburn	Enhancing Automated Hate Speech Detection: Addressing Islamophobia and Freedom of Speech in Online Discussions	Full	30
	FOSI	Rohan Leekha and Courtland Vandam	A generalized solution to verify authorship and detect style change in multi-authored documents	Full	30
		Yiping Liu, Jiamou Liu, Bakh Khoussainov, Miao Qiao, Mengxiao Zhang and Bo Yan	Centralization Problem for Opinion Convergence in Decentralized Networks	Full	30

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Sessions	Authors	Paper Title	Туре	Time-Slot
	Hsiao-Fan Wang and Cai-Lin Huang	How to Acquire Sufficient and Effective Information?	Short	20
_ _ _	Ahmed Almohanadi and Shohei Yokoyama	Emotion Mapping: Sentiment Analysis using Emoji in Twitter Data from Japan in the COVID-19 Era	Short	20
FAB	Yidan Sun and Mayank Kejriwal	A structural study of Big Tech firm-switching of inventors in the post-recession era	Full	30
	Ying Zhao and Charles Zhou	Quantum Theoretic Values of Collaborative and Self-organizing Agents	Full	30
	Clay Duncan and Ian Mcculloh	Unmasking Bias in Chat GPT Responses	Full	30
FAB II	Md Rayhan Kabir, Seeratpal Jaura and Osmar Zaïane	CFAR++: Enhancing Rule Based Classifier	Full	30
FA	Wenchuan Mu and Kwan Hui Lim	Modelling Text Similarity: A Survey	Full	30
	Giovana Voltoline, Sebastião Pais, Bruno Silva and João Cordeiro	Understanding Massive Text Visualization	Short	20
Sessions	Authors	Paper Title	Type	Time-Slot
dous	Po-Hsuan Huang and Hsuan-Lei Shao	Comparison between the Structures of Word Co-occurrence and Word Similarity Networks for Ill-formed and Well-formed Texts in Taiwan Mandarin	Full	30
2023 Works Session I	I-Hsien Ting, Kazunori Minetaki, Mei-Yun Hsu and Chia Sung Yen	Applying Social Network Embedding and Word Embedding for Socialbots Detection	Full	30
MSNDS 2023 Workshop Session I	Chia-Tung Tsai and Min-Yuh Day	CMSI: Carbon Market Sentiment Index with AI Text Analytics	Full	30
MSM	Carson Leung and Adam Pazdor	Social network mining and analytics for quantitative patterns	Full	30

Sessions	Authors	Paper Title	Туре	Time-Slot
rkshop	Carson Leung and Qi Wen	Personalized privacy-preserving semi-centralized recommendation system in a social network	Full	30
MSNDS 2023 workshop Session II	William Power and Zoran Obradovic	Understanding Online Attitudes with Pre-Trained Language Models	Full	30
MSND8	Mert Can Cakmak, Obianuju Okeke, Ugochukwu Onyepunuka, Billy Spann and Nitin Agarwal	Analyzing Bias in Recommender Systems: A Comprehensive Evaluation of YouTube's Recommendation Algorithm	Full	30
Sessions	Authors	Paper Title	Type	Time-Slot
kshop	Franziska Goll and Karsten Huffstadt	Social Media Usage Behavior - Does a break for impulse control between the stimulus to open a social media app and the actual response to open the app reduce the total time spent using a social media app?	Full	30
SidEWayS 2023 Workshop Session	Carmela Comito.	Exploring COVID-19 Discourse: Analyzing Sentiments in Twitter Topics	Full	30
/S 2023 W Session	Laura Ventrice and Luigi Di Caro.	Enriching Wikipedia Texts through Geographic Information Extraction	Full	30
dEWa)	Benjamin Shultz	An Entity-Aware Approach to Logical Fallacy Detection in Kremlin Social Media Content	Full	30
Š	Youcef Benkhedda, Peng Xiao and Walid Magdy	Emoji are Effective Predictors of User's Demographics	Full	30

The Rise of the Fediverse: Shaping the Future of Social Media Research through Mastodon

Lucio La Cava

DIMES Department, University of Calabria, Italy Iucio.lacava@dimes.unical.it

## **Abstract**

Centralized Online Social Networks are facing shifts in user engagement due to sudden policy changes and restricted API access. Consequently, Decentralized Online Social Networks are gaining popularity as a valid alternative, leading to the development of the Fediverse, i.e., the universe of interconnected decen- tralized platforms. Among these, Mastodon has emerged as the most widely adopted one, and its free APIs provide a unique opportunity for thriving so- cial media research. This tutorial aims to (1) illustrate the emerging domain of Decentralized Online Social Networks, (2) discuss the state-of-the-art in so- cial network analysis and mining research on Mastodon and the Fediverse, (3) discuss the main challenges and opportunities involving this social paradigm, and (4) introduce participants to the usage of Mastodon APIs. As a result, researchers and practitioners in ASONAM-related fields will gain a greater un- derstanding of this promising new paradigm, which has the potential to influence the direction of future social media research significantly.

## **Biography**

Lucio La Cava is a Ph.D. Student in Information and Communication Technologies at the Department of Computer Engineering, Modeling, Electronics, and Systems Engineering (DIMES) of the University of Calabria, Italy. His research project involves studying and characterizing emerging socio-economic domains through multimodal deep learning techniques (including Graph Representation Learning, NLP, Computer Vision) in conjunction with Network Science methodologies. His main focus is on Decentralized Online Social Networks (DOSNs) and the Web3 ecosystem. He is a member of the Machine Learning, NLP and Network Science Team @Artificial Intelligence and Data Science Lab at DIMES. He also serves as a reviewer for international premier conferences (IJCAI, KDD, ICDM, WWW, etc.) and journals.

# **Building a Continuous Social Media Data Collection System**

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## **Abstract**

There has been a recent shift by major social media platforms to restrict access to data. As a concrete example, Reddit, one of the more heavily studied social media platforms, recently changed their terms of service in a way that shut down the primary source used by researchers. The writing is on the wall: researchers need to get more serious about social media data collection. Drawing from my decade plus of experience, in this tutorial, I will provide the necessary toolkit to design and build continuous social media data collection systems. The major focus will be on the system aspect, i.e., how do we build a robust, low resource usage, long running system that can handle all the uncertainties involved and remain stable for multiple years.

# **Biography**

Jeremy Blackburn is an Associate Professor in the Dept. of Computer Science at Binghamton University. His best known work is related to fringe Web communities, over the course of which he has collected some of the most novel and widely used social media datasets in existence. Prior to his career in academia, Jeremy was a Principal Developer and served as advisor for several startups. He still writes several tens of thousands of lines of code per year, most of it related to large-scale social media data collection, management, and analysis.

## Mining and analyzing temporal networks with graph evolution rules

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#### Abstract

Discerning and deriving insights from temporal networks is essential for understanding their dynamic nature and uncovering their evolving features. Current strategies for modeling network evolution frequently assume that it is led by a single dynamic mechanism like triadic closure, or homophily, disregarding the well-known heterogeneous user behavior that is prevalent in large-scale networks. To address this limitation, methods based on graph evolution rules (GER) mining have proven promising. Similar to association rules in data mining, a graph evolution rule consists of a precondition and a postcondition. These rules suggest that a subgraph matching the precondition is likely to evolve into the postcondition, providing human-readable and explainable outcomes.

Although the graph B183evolution rules approach holds significant promise, there is a notable absence of a cohesive research framework with shared terminology or formalization. Furthermore, the existing algorithms frequently pose usability challenges since they demand data formats for input and output that are not readily intuitive and easy to embrace. This tutorial aims at providing the audience with a gentle introduction to the fascinating world of evolving networks to understand why graph evolution rules are valuable. In the final part, we will provide an hackers' guide for graph evolution rules, which serves as a comprehensive resource for applying, analyzing, and visually representing graph evolution rules.

## **Biographies**

Alessia Galdeman received a degree in Computer Science for digital communication in 2018, and a master degree in Computer Science in 2021. She is currently a senior Ph.D. student at the Computer Science Department of the University of Milan, where she is also a tutor of social media mining, network science and machine learning courses. She is web chair of the International Conference on Complex Networks and their Applications. Her current research interests include temporal networks, subgraph mining, Web3 platforms.

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