

Samer Al-khateeb

Education

Ph.D. in Computer and Information Sciences

Fall 2017

University of Arkansas at Little Rock

Little Rock, Arkansas

Concentration: Information Science

Dissertation Title: "Studying Online Deviant Groups (ODGs): A Socio-Technical Approach Leveraging Social Network Analysis (SNA) & Social Cyber Forensics (SCF) Techniques"

Dissertation Committee: Nitin Agarwal (Chair), Elizabeth Pierce, Mariofanna Milanova, Ningning Wu, and Serhan Dagtas

GPA: 4.0/4.0

Master of Science in Applied Science

Summer 2015

University of Arkansas at Little Rock

Little Rock, Arkansas

Concentration: Information Science

Project Title: "Modeling Deviant Cyber Flash Mobs (DCFM) in Cyberspace"

Project Committee: Nitin Agarwal (Chair), Hayder Al-Shukri, Elizabeth Pierce, and Brian Berry

GPA: 4.0/4.0

Bachelor of Science in Computer Science

Spring 2013

University of Arkansas at Little Rock

Little Rock, Arkansas

Major: Computer Science

Minor: Electronics & Computer Engineering Technology

Advisor: Steven Minsker

GPA: 3.78/4.0

Research Interest

- Analysis and Modeling of:
 - Deviant Behaviors on Social Media.
 - Cyber Collective Actions.
 - Mobs, Deviant Cyber Flash Mobs (DCFM).
 - Cyber Propaganda Campaigns.
- Social Network Analysis (SNA).
- Social Cyber Forensics (SCF) techniques, methodologies, and tools.
- Social Computing and Social Media Mining.
- Social Bots Behaviors, Evolution, and Detection.
- Content analysis, e.g., toxicity, sentiments, and correlation analysis.
- Modeling of Human Behavior, e.g., Agent-based Modeling.

Academic Experience

Assistant Professor of Computer Science

Fall 2018 - Current

Department of Computer Science, Design and Journalism, Creighton University

Affiliate Graduate Faculty

Spring 2018- Current

Department of Information Science, University of Arkansas at Little Rock

Last updated: Thursday, May 25, 2023

Postdoctoral Research Fellow

Spring 2018 - Fall 2018

Department of Information Science, University of Arkansas at Little Rock

Teaching Assistant

Department of Information Science, University of Arkansas at Little Rock

- System Analysis and Design (IFSC 3360) Fall 2017
- Information System Analysis (IFSC 7310) Spring 2016, 2017, 2018
- Social Computing (IFSC 4360/5360) Fall 2016, Spring 2018
- Social Media Mining and Analytics (IFSC 4399/5399) Fall 2015

Lab Instructor

Department of Physics and Astronomy, University of Arkansas at Little Rock

- Physics for Scientists and Engineers II Laboratory (PHYS 2122) Summer 2014, Fall 2014, Spring 2015

Tutor

Department of Physics and Astronomy, University of Arkansas at Little Rock

- Physics for Scientists and Engineers I (PHYS 2321) Fall 2012, Spring 2013
- Physics for Scientists and Engineers II (PHYS 2322) Fall 2012, Spring 2013

Industrial Experience

Computer Technician 08/2011-05/2014

Department of Applied Science, University of Arkansas at Little Rock

Executive Resident 06/2013-08/2013

DSG Consulting Inc.

Student Intern 08/2012-12/2012

University of Arkansas for Medical Science

Research Manager 05/2012-08/2012

DSG Consulting Inc.

Teaching

- **Courses taught at Creighton University:**
 - **CSC 121:** Computers and Scientific Thinking
 - **CSC 221:** Introduction to Programming
 - **CSC 445:** Social Networks Analytics
 - **CSC 590 (ST):** Social Media & Cyber Forensics Analytics
 - **CSC 499:** Directed Internship
 - **CSC 550:** Introduction to Artificial Intelligence
 - **CSC 551:** Web Programming
 - **CSC 542:** Database Design and Security

Publications

Forthcoming Publications:

1. **Samer Al-khateeb**, Eric Wiebelhaus-Brahm, and Nitin Agarwal. "Social Media Justice and Peacebuilding Mobilization for Syria". The Midsouth Political Science Review (MPSR) Journal.
 - **Status:** the paper is accepted and will appear in Vol. 23 at the end of 2023.
2. **Samer Al-khateeb** and Nitin Agarwal. "Studying Simulated Mobs Using Monte Carlo Method and the Theory of Collective Action". The Modelling and Simulation of Social-Behavioural Phenomena in Creative Societies (MSBC 2022). September 21-23, 2022. Vilnius, Lithuania.
 - **Status:** the paper is accepted, and the conference proceedings will appear online in June 2023.
3. **Samer Al-khateeb**, Jack Burright, Nitin Agarwal, and Rebecca Murray. "An Agent-Based Model of Mobs Using Theoretical Constructs of Collective Action". The 2023 Annual Modeling and Simulation Conference (ANNSIM 2023). May 23 - 26, 2023. Mohawk College, Ontario, Canada.
 - **Status:** the paper is accepted, and the conference proceedings will appear online in June 2023.
4. Moe Madouh, Rich Johnson, **Samer Al-khateeb**, Kyran Cupido, and Miles Romney. "Inspiration, fairness, cheating, and transphobia: An analysis of tweets about Lia Thomas' NCAA swimming championship". The Association for Education in Journalism and Mass Communication (AEJMC2023).
 - **Status:** Accepted and will be presented at the conference in August 2023.
5. Rich Johnson, **Samer Al-khateeb**, Ali Forbes, and Kyran Cupido. "Targeted Twitter harassment: A comparative analysis of toxicity toward male and female sports reporters". The Association for Education in Journalism and Mass Communication (AEJMC2023).
 - **Status:** Accepted and will be presented at the conference in August 2023.

Books:

1. **Samer Al-khateeb** and Nitin Agarwal. "Deviance in Social Media and Social Cyber Forensics: Uncovering Hidden Relations Using OSINF". Springer, Spring 2019.

Book Chapters & Encyclopedia Articles:

1. **Samer Al-khateeb**, Rolf T. Wigand, and Nitin Agarwal. "Misinformation Campaigns. Applying Motivated Reasoning and Information Manipulation Theory to Understand the Role and Impact of Social Media in the Digital Transformation". In: Alm, N., Murschetz, P.C., Weder, F., Friedrichsen, M. (eds) Die digitale Transformation der Medien. Springer Gabler, Wiesbaden. July 09, 2022. https://doi.org/10.1007/978-3-658-36276-8_18
2. Katrin Galeano, Rick Galeano, **Samer Al-khateeb**, and Nitin Agarwal. "Chapter 2: Studying the Weaponization of Social Media: Case Studies of Anti-NATO Disinformation Campaigns". In: Tayebi M., Glässer U., Skillicorn D. (eds) Open Source Intelligence and Cyber Crime. Lecture Notes in Social Networks. Springer, Cham. August 01, 2020.
3. **Samer Al-khateeb** and Nitin Agarwal. "Social Media and Security". In Schintler, Laurie A. and McNeely, Connie L., "Encyclopedia of Big Data" (ISBN: 978-3-319-32001-4). Springer International Publishing, July 2020.
4. Rick Galeano, Katrin Galeano, **Samer Al-khateeb**, Nitin Agarwal, James Turner. "Botnet Evolution During Modern Day Large-Scale Combat Operations". In a seven-book set titled "Large Scale Combat Operations", book titled "Information Operations: Perceptions are Reality", Chapter 10. Col. Mark Vertuli (Ed.). Army University Press. October 2018.
5. **Samer Al-khateeb**, Muhammad Hussain, and Nitin Agarwal. "Leveraging Social Network Analysis & Cyber Forensics Approaches to Study Cyber Propaganda Campaigns". In "Social Network and

Surveillance for Society”, Chapter 2, pp. 19-42. T. Ozyer, S. Bakshi, and R. Alhadj (Eds.). Lecture Notes in Social Networks, Springer, August 2018. DOI: 10.1007/978-3-319-78256-0, ISBN (Print): 978-3-319-78255-3, ISBN (Online): 978-3-319-78256-0.

6. **Samer Al-khateeb**, Muhammad Nihal Hussain, and Nitin Agarwal. “*Analyzing Deviant Socio-technical Behaviors using Social Network Analysis and Cyber Forensics-based Methodologies*”. In “*Big Data Analytics in Cybersecurity and IT Management*”, Chapter 12. O. Savas & J. Deng (Eds.), September 2017. ISBN: 978-1-4987-72129. New York, NY: CRC Press, Taylor & Francis.

Journal Articles:

1. **Samer Al-khateeb** and Nitin Agarwal. “*Flash mob: a multidisciplinary review*”. Social Network Analysis and Mining Journal. October 13, 2021.
2. **Samer Al-khateeb** and Nitin Agarwal. “*Social Cyber Forensics: Leveraging Open-Source Information and Social Network Analysis to Advance Cyber Security Informatics*”. Journal of Computational and Mathematical Organization Theory (CMOT), July 19, 2019.
3. Esther Ledelle Mead, Muhammad Nihal Hussain, Mohammad Nooman, **Samer Al-khateeb**, and Nitin Agarwal. “*Voices from Venezuela: Examining blogs to study the socio-politico-economic crisis and consequent emigration*”. IARIA International Journal on Advances in Internet Technology, Vol. 11, No. 1-2, June 2018.
4. Nitin Agarwal, **Samer Al-khateeb**, Rick Galeano, and Rebecca Goolsby. “*Examining The Use Of Botnets And Their Evolution In Propaganda Dissemination*”. Journal of Defence Strategic Communications, Vol. 2. No. 2, pp. 87-112. 2017.
5. **Samer Al-khateeb**, Kevin J Conlan, Nitin Agarwal, Ibrahim Baggili, and Frank Breitingner. “*Exploring Deviant Hacker Networks (DHN) On Social Media Platforms*”. Journal of Digital Forensics, Security and Law, Vol. 11. No. 2, pp. 7-20. 2016.
 - *Also presented and included in the proceedings of the 8th EAI International Conference on Digital Forensics & Cyber Crime (ICDF2C 2016), September 28-30, 2016, New York City, USA.*
6. **Samer Al-khateeb** and Nitin Agarwal. “*Understanding Strategic Information Maneuvers in Network Media to Advance Cyber Operations: A Case Study Analyzing pro-Russian Separatists’ Cyber Information Operations in Crimean Water Crisis*”. Journal on Baltic Security, Vol. 2, Issue 1, pp. 6-27, 2016.
 - *Also presented and included in the proceedings of the 9th International Lesson Learned Conference (ILLC2015), June 1-4, 2015, Tartu, Estonia.*
7. **Samer Al-khateeb** and Nitin Agarwal. “*Developing a Conceptual Framework for Modeling Deviant Cyber Flash Mob: A Socio-Computational Approach Leveraging Hypergraph Constructs*”. Journal of Digital Forensics, Security and Law, Vol. 9. No. 2, pp. 113-127. 2014.
 - *Also included in the proceedings of the 6th International Conference on Digital Forensics & Cyber Crime, September 18-19 New Haven, United States.*

Conferences Proceedings:

1. **Samer Al-khateeb**. “*Dapping Into the Fediverse: Analyzing What’s Trending on Mastodon Social*”. International Conference on Social Computing, Behavioral-Cultural Modeling and Prediction, and Behavior Representation in Modeling and Simulation (SBP-BRiMS 2022). September 20-23, 2022. Hybrid, Carnegie Mellon University, Pittsburgh, PA, USA.
2. **Samer Al-khateeb**, Madelyn Anderson, and Nitin Agarwal. “*Studying the Role of Social Bots During Cyber Flash Mobs*”. International Conference on Social Computing, Behavioral-Cultural Modeling and Prediction, and Behavior Representation in Modeling and Simulation (SBP-BRiMS 2021). July 06-09, 2021, Virtual. Conference Proceedings.
3. Mustafa Alassad, Billy Spann, **Samer Al-khateeb**, and Nitin Agarwal. “*Using Computational Social Science Techniques to Identify Coordinated Cyber Threats to Smart City Networks*”. 1st Joint International Conference on Design and Construction of Smart City Components, December 17-19,

- 2019, Cairo, Egypt. (JIC Smart Cities 2019) pp 316-326. First Online: 24 January 2021.
4. Julia Thee, Izzat Alsmadi, and **Samer Al-Khateeb**. "Pro-ISIS Tweets Analysis Using Machine Learning Techniques". Workshop on Deviant Activities on Social Media, in conjunction with 2020 IEEE Conference on BigData (IEEE BigData 2020) December 10-13, 2020, Atlanta, GA, USA.
 5. Thomas Marcoux, Nitin Agarwal, Obadimu Adewale, Muhammad Nihal Hussain, Katrin Kania Galeano, **Samer Al-khateeb**. "Understanding Information Operations using YouTubeTracker". IEEE/WIC/ACM International Conference on Web Intelligence (WI '19 Companion), October 14–17, 2019, Thessaloniki, Greece.
 6. Adewale Obadimu, Esther Mead, **Samer Al-Khateeb**, and Nitin Agarwal. "A Comparative Analysis of Facebook and Twitter Bots". Southern Association for Information Systems (SAIS). SAIS 2019 Proceedings 25 (June 04, 2019). <https://aisel.aisnet.org/sais2019/25>
 7. Muhammad Nihal Hussain, Kiran Kumar Bandeli, Serpil Tokdemir, **Samer Al-khateeb**, and Nitin Agarwal. "Understanding Digital Ethnography: Socio-computational Analysis of Trending YouTube Videos". The Eighth International Conference on Social Media Technologies, Communication, and Informatics (SOTICS 2018), October 14-18, 2018, Nice, France. (**Won Best Paper Award**)
 8. Muhammad Nihal Hussain, **Samer Al-khateeb**, Serpil Tokdemir, and Nitin Agarwal. "Analyzing Disinformation and Crowd Manipulation Tactics on YouTube". The 2018 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), August 28-31, 2018, Barcelona, Spain.
 9. Tuja Khaund, Kiran Kumar Bandeli, Muhammad Nihal Hussain, Adewale Obadimu, **Samer Al-khateeb**, and Nitin Agarwal. "Analyzing Social and Communication Network Structures of Social Bots and Humans". The 2018 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), August 28-31, 2018, Barcelona, Spain.
 10. Tuja Khaund, **Samer Al-Khateeb**, Serpil Tokdemir, and Nitin Agarwal. "Analyzing Social Bots and their Coordination during Natural Disasters". International Conference on Social Computing, Behavioral-Cultural Modeling and Prediction and Behavior Representation in Modeling and Simulation (SBP-BRiMS 2018), July 10-13, 2018, Washington D.C., USA.
 11. Muhammad Nihal Hussain, Kiran Kumar Bandeli, **Samer Al-khateeb**, and Nitin Agarwal. "Analyzing Shift in Narratives Regarding Migrants in Europe via Blogosphere". Proceedings of the International Workshop on Narrative Extraction from Texts (Text2Story 2018) co-located with the 40th European Conference on Information Retrieval (ECIR). Volume 2077, pp 33-40. Grenoble, France. March 26-29, 2018.
 12. Esther Ledelle Mead, Muhammad Nihal Hussain, Mohammad Nooman, **Samer Al-khateeb**, and Nitin Agarwal. "Assessing Situation Awareness through Blogosphere: A Case Study on Venezuelan Socio-Political Crisis and the Migrant Influx". The Seventh International Conference on Social Media Technologies, Communication, and Informatics (SOTICS 2017), October 8 - 12, 2017, Athens, Greece. (**Won Best Paper Award**)
 13. **Samer Al-khateeb**, Muhammad Nihal Hussain, and Nitin Agarwal. "Social Cyber Forensics Approach to Study Twitter's and Blogs' Influence on Propaganda Campaigns". International Conference on Social Computing, Behavioral-Cultural Modeling and Prediction and Behavior Representation in Modeling and Simulation (SBP-BRiMS 2017), July 5 - 8, 2017, Washington D.C., USA.
 14. Muhammad Nihal Hussain, Adewale Obadimu, Kiran Kumar Bandeli, Mohammad Nooman, **Samer Al-khateeb**, and Nitin Agarwal. "A Framework for Blog Data Collection: Challenges and Opportunities". The IARIA International Symposium on Designing, Validating, and Using Datasets (DATASETS 2017), June 25 - 29, 2017, Venice, Italy.
 15. **Samer Al-khateeb** and Nitin Agarwal. "The Rise & Fall of #NoBackDoor on Twitter: the Apple vs. FBI Case". In Proceedings of the International Symposium on Foundations of Open-Source Intelligence and Security Informatics (FOSINT-SI 2016) co-located with the 2016 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM 2016), August 19-20, 2016, San Francisco, California, USA.

16. **Samer Al-khateeb** and Nitin Agarwal. "Examining Botnet Behaviors for Propaganda Dissemination: A Case Study of ISIL's Beheading Videos-based Propaganda". In Proceedings of the Behavior Analysis, Modeling, and Steering (BEAMS 2015) co-located with the IEEE International Conference on Data Mining (ICDM 2015), November 14-17, 2015, Atlantic City, New Jersey, USA.
17. **Samer Al-khateeb**, Engin Mendi, and Coskun Bayrak. "A Comparative Analysis of Digital Filtering for Seismic Signals from Adana, Van, and Bingol Earthquakes in Turkey". In Proceedings of the International Conference on Information Processing and Control Engineering (ICIPCE-2015), April 15-17, 2015, Bauman Moscow State Technical University, Russia.
18. **Samer Al-khateeb** and Nitin Agarwal. "Analyzing Deviant Cyber Flash Mobs of ISIL on Twitter". In Proceedings of the International Conference on Social Computing, Behavioral-Cultural Modeling, and Prediction (SBP15), March 31 April 3, 2015, UCDC Center, Washington DC, USA.
19. **Samer Al-khateeb** and Nitin Agarwal. "Analyzing Flash Mobs in Cybernetic Space and the Imminent Security Threats: A Collective Action based Theoretical Perspective on Emerging Sociotechnical Behaviors". In Proceedings of the AAAI Spring Symposium 2015 on Socio-technical Behavior Mining: From Data to Decisions, AAAI Spring 2015 Symposium on Socio-Technical Behavior Mining, March 23-25, 2015, Palo Alto, California, USA.
20. **Samer Al-khateeb** and Nitin Agarwal. "Modeling Flash Mobs in Cybernetic Space: Evaluating Threats from Emerging Socio-Technical Behaviors to Human Security". In Proceedings of the IEEE Joint Intelligence and Security Informatics Conference (JISIC 2014), September 24-26, 2014, Hague, Netherlands.

Conferences, Posters, and Presentations:

1. Tessa Gaynor and **Samer Al-khateeb**. "Analyzing the Twitter Chatter about the Gender Wage Gap Issue". The poster was presented during the Creighton University Honors Day on Wednesday, April 12, 2023 from 2-5 on the 4th floor of Harper Center ([Poster, not peer reviewed](#)).
2. Jack Burrig and **Samer Al-khateeb**. "Utilizing NetLogo to Simulate Mobs: An Agent-based Modeling Approach". The 2023 National Conference on Undergraduate Research (NCUR 2023), April 13-15, 2023, University of Wisconsin, Eau Claire, Wisconsin, USA ([Poster](#)).
3. Madelyn Anderson and **Samer Al-khateeb**. "Studying the Role of Social Bots During Cyber Flash Mobs" the 2022 CURAS Research and Scholarship Fair on Monday, January 31, 2022, at Skutt Student Center ([Poster, not peer reviewed](#)).
 - o [The poster was also presented during the Creighton University Honors Day on Wednesday, April 13, 2022, from 2-5 on the 4th floor of Harper Center \(Poster, not peer reviewed\).](#)
4. **Samer Al-khateeb**. "Designing and Implementing a Data Repository for Cyber Flash Mobs" the St. Albert/University Day on April 20-22, 2021 ([Poster, not peer reviewed](#)).
5. Madelyn Anderson and **Samer Al-khateeb**. "Designing and Implementing a Data Repository for Cyber Flash Mobs" the 2021 CURAS Research and Scholarship Fair on Tuesday, March 2, 2021 ([Poster, not peer reviewed](#)).
6. **Samer Al-khateeb** and Nitin Agarwal. "Socio-computational Approaches for Cyber Threat Analysis". INFORMS 2019 Annual Meeting. October 20-23, 2019, Seattle Washington, USA. ([Presentation, not peer reviewed](#))
7. Tuja Khaund, Billy Spann, Richard Young, **Samer Al-khateeb**, and Nitin Agarwal. "Blog Farm Detection Using Social Network Analysis and Social Cyber Forensics Informed Methodologies". International Conference on Social Computing, Behavioral-Cultural Modeling and Prediction and Behavior Representation in Modeling and Simulation (SBP-BRiMS 2019), July 9-12, 2019, Washington D.C., USA ([Poster](#))
8. **Samer Al-khateeb**, Muhammad Nihal Hussain, and Nitin Agarwal. "When Citizen Journalism Goes Rogue: A Case Study of Anti-West Misinformation Campaigns During the 2014 Russian-Ukraine Conflict". The 5th International Conference on Bridging Gaps: Where is the Critic in Television Journalism?, Centre for Media and Celebrity Studies (CMCS), CUNY School of Journalism, August 31

- September 1, 2017, New York City, USA. ([Conference Presentation](#))
9. **Samer Al-khateeb**, Muhammad Nihal Hussain, and Nitin Agarwal. “*Leveraging Social Network Analysis & Cyber Forensics Approaches to Study Cyber Propaganda Campaigns*”. The 1st North American Social Networks Conference of the International Network for Social Network Analysis (NASN 2017), July 26 - 30, Washington DC, USA. ([Conference Presentation](#))
 10. Kiran Kumar Bandeli, Muhammad Nihal Hussain, **Samer Al-khateeb**, and Nitin Agarwal. “*Towards Developing Methodology to Stem the Tide of Fake News*”. International Conference on Social Computing, Behavioral-Cultural Modeling & Prediction and Behavior Representation in Modeling and Simulation (SBP-BRIMS 2017) (Challenge Track), July 5 - 8, 2017, Washington D.C., USA. ([Poster](#))
 11. Muhammad Nihal Hussain, Kiran Bandeli, Mohammad Nooman, **Samer Al-khateeb**, and Nitin Agarwal. “*Analyzing the Voices during European Migrant Crisis in Blogosphere*”. The 2nd International Workshop on Event Analytics using Social Media Data associated with the 11th International AAAI Conference on Web and Social Media (ICWSM 2017), May 15-18, 2017, Montreal, Canada. ([Conference Presentation](#))
 12. **Samer Al-khateeb**, Muhammad Nihal Hussain, and Nitin Agarwal. “*Exploring ISIL Cyber Network Activities: Evolution, Means, and Strategies*”. In the 36th International Sunbelt Social Network Conference (Sunbelt XXXVI) organized by the International Network for Social Network Analysis (INSNA), April 5-10, 2016, Newport Beach, California. ([Conference Presentation](#))

Tutorials Presenter

1. **Samer Al-khateeb** and Nitin Agarwal. A tutorial on “*Socio-computational Analysis of Mobs: A Social Network and Cyber Forensic Approach*” for the International Conference on Social Computing, Behavioral-Cultural Modeling & Prediction and Behavior Representation in Modeling and Simulation (SBP-BRIMS2021). July 6, 2021.
2. Nitin Agarwal and **Samer Al-khateeb**. A tutorial on “*Social Cyber Forensics*” for Center for Computational Analysis of Social and Organizational Systems (CASOS), Carnegie Mellon University, September 11, 2017.
3. Nitin Agarwal, **Samer Al-khateeb**, and Muhammad Nihal Hussain. A tutorial on “*Social Cyber Forensics: Discovering Hidden Connections, Information Flows, And Information Actors in the Modern Information Environment*” presented at the 2017 International Conference on Social Computing, Behavioral-Cultural Modeling & Prediction and Behavior Representation in Modeling and Simulation. July 5-8, 2017, Lehman Auditorium, George Washington University, Washington DC, USA.
4. Nitin Agarwal, **Samer Al-khateeb**, and Muhammad Nihal Hussain. A tutorial on “*Propaganda and Group Characterization*” presented under RTG HFM-248 Human Networks Analysis at the NATO TIDE Sprint conference - Open-Source Information (OSINF) track. October 24-28, 2016, Virginia Beach, USA.
5. Nitin Agarwal and **Samer Al-khateeb**. A tutorial on “*Understanding Influence Operations of Daesh and Novorossiya through Blogs and Twitter*” presented at the NATO TIDE Sprint 27 conference, April 11-15, 2016, Krakow, Poland.
6. Nitin Agarwal and **Samer Al-khateeb**. A tutorial on “*Understanding Influence Operations of Daesh and Novorossiya through Blogs and Twitter*” presented at the Dark Web Workshop, March 22-24, 2016, U.S. Naval Postgraduate School, Monterey Bay, California.

Invited Presentations

1. **Samer Al-khateeb**. An invited talk “*Building a Computational Model of Mobs Leveraging Social Science Theories*” presented to the South Big Data Hub Social Cybersecurity Working Group on June 1, 2023 ([Virtual](#)).
2. **Samer Al-khateeb**. An invited talk “*Deviance in Social Media and Social Cyber Forensics*”

- presented at the Media Literacy and Information Concepts class (JRM 215). December 5, 2019.
3. **Samer Al-khateeb.** An invited talk "*The Power of Social Media Analytics*" presented at Creighton University Physics Colloquium. October 19, 2019.
 4. **Samer Al-Khateeb.** An invited talk "*The Power of Social Media Analytics*" presented at Harding University. March 14, 2018. Searcy, AR, USA.
 5. **Samer Al-khateeb.** A tutorial on "*Gephi: For Network Data Analysis, Visualization, and Collection*" presented for the IFSC 4360/5360 Social Computing at the University of Arkansas at Little Rock. October 12, 2016. Little Rock, AR, USA.
 6. **Samer Al-khateeb.** A tutorial on "*Network Overview Discovery and Exploration for Excel (NodeXL)*" presented for the IFSC 4399/5399 Social Media Mining and Analytics Class at the University of Arkansas at Little Rock. September 28, 2016. Little Rock, AR, USA.
 7. **Samer Al-khateeb.** A tutorial on "*Social Cyber Forensics Analysis Using Maltego*" presented for the IFSC 1105 FYE for IFSC Majors class at the University of Arkansas at Little Rock. September 20, 2016. Little Rock, AR, USA.
 8. **Samer Al-khateeb.** A tutorial on "*Gephi and Cytoscape: Network Data Visualization*" presented for the IFSC 4399/5399 Social Media Mining and Analytics Class at the University of Arkansas at Little Rock. October 1, 2015. Little Rock, AR, USA.

Participation in Funded Projects

Since I Joined Creighton University:

Funded:

1. **Building a Computational Model of Mobs Leveraging Social Science Theories**

The research is funded by the Office of the Under Secretary of Defense for Research and Engineering (OUSD), awarded by the Air Force Office of Scientific Research (AFOSR), and administered through the Office of Naval Research (ONR) Defense Established Program to Stimulate Competitive Research (DEPSCoR) – Research Collaboration (RC).

Award number: FA9550-22-1-0332

Total award amount from the government: \$579,807.00 and the total amount is \$660,407.00.

Project Period: 07/01/2022 - 06/30/2025

My Role: Principal investigator (PI)

Collaborators: Dr. Nitin Agarwal (UA-Little Rock) and Dr. Rebecca Murray (Creighton University)

2. **Designing and Implementing a Data Repository for Cyber Flash Mobs.**

The research project is funded by the Center for Undergraduate Research and Scholarship (CURAS) at Creighton University, Omaha NE.

Total award amount: \$10,000

Project Period: 05/01/2020 - 12/01/2020

My Role: Principal investigator (PI)

Rejected:

1. **Using Social Science Theories and Monte Carlo Method to Simulate and Study Mobs**

This project was submitted as one of the requirements for the Haddix-funded pre-tenure sabbatical. The application was submitted on July 19, 2021 and was rejected on November 15, 2021.

Before I Join Creighton University:

1. **Socio-computational Predictive Methods to Detect and Mitigate Bot Activity in Novel Information Environments.**

The research project is funded by the DARPA Small Business Innovation Research (SBIR)

Award number (Phase-2 grant): W31P4Q-17-C-0059.

Total award amount: \$1,000,000.
 Project Period: 09/01/2016 - 08/31/2019.
 Collaborators: Intelligent Automation, Inc.

My role in this project:

I was hired by this grant to do research on different topics such as the usage of botnets by deviant groups on social media and research on blogosphere data collection and analysis. This grant covered the travel costs of attending conferences to present the results of the research. I also attended all projects meetings and presented the results of the research to program managers.

2. **Towards Predictive Modeling Deviant Cyber Flash Mobs: A Socio-Informatics Driven Hypergraph Framework.**

The project is funded by the U.S. Army Research Office (ARO) under Social and Cognitive Networks program within the Network Sciences division.

Award number: W911NF-16-1-0189.

Program Officer: Dr. Edward Palazzolo

Total award amount: \$300,000.

Project Period: 06/01/2016 - 05/31/2019.

My role in this project:

I was hired by this grant to do research on Deviant Cyber Flash Mobs conducted by ISIL/ISIS/Daesh and operationalize a theoretical model on Twitter data. I presented the results of this research in three conferences of which their traveling cost was supported by this grant. I also helped in writing project progress reports, presented the results of the research to program managers, and attended all projects meetings.

3. **Developing Novel Socio-computational Methodologies to Analyze Multimedia-based Cyber Propaganda Campaigns.**

This project is funded by the U.S. Office of Naval Research (ONR) under Thrust Code 341

Award number: N00014-17-1-2605.

Program Officer: Dr. Rebecca Goolsby.

Total award amount: \$1,530,778.

Project Period: 06/01/2017 - 01/31/2019.

My role in this project:

I was hired by this grant with a group of students to study and assess the socio-political crisis and the migrant influx in Venezuela and Europe through the blogosphere. This project resulted in two conference papers of which their traveling cost was supported by this grant. I also attended all projects meetings.

4. **Analyzing Integrated Social Media-Facilitated Propaganda Campaigns using Social Network Analysis and Cyber Forensics.**

This project is funded by the U.S. Office of Naval Research (ONR) under Thrust Code 341

Award number: N00014-16-1-2412.

Program Officer: Dr. Rebecca Goolsby.

Total award amount: \$190,000.

Project Period: 05/01/2016 - 09/30/2018.

My role in this project:

I was hired by this grant to do research on the usage of social media by different hacker's groups. Then, I worked with a group of students on a project to assess the socio-political crisis and the migrant influx in Venezuela through the blogosphere. I presented two conference papers of which their traveling cost was supported by this grant. I also attended all projects meetings.

5. **MRI: Acquisition of Peta-Scale Data Storage System for Big Data Exploration in STEM Fields.**

The research project is funded in part by the U.S. National Science Foundation's (NSF) Advanced Cyber infrastructure (ACI) program.

Award number: ACI-1429160.
 Total award amount: \$291,908.
 Project period: 09/01/2014 - 08/31/2018

My role in this project:

I was hired by this grant to do research on different topics such as the usage of botnet by deviant groups on social media, the case of Apple vs. FBI discussion on Twitter, and research on blogosphere data collection and analysis. This grant covered the travel costs of seven conferences papers. I also attended all projects meetings and presented the results of the research to program managers.

6. Data-Intensive High-Density Computational Equipment for Research on Monitoring Cyber Warfare Tactics through Social Media.

The project is funded by the U.S. Office of Naval Research (ONR) under Defense University Research Instrumentation Program (DURIP).

Award number: N00014-16-1-2016.

Total award amount: \$85,964.

Project Period: 11/15/2015 - 12/14/2016.

My role in this project:

I was hired by this grant to do research on the usage of social media by different hacker's groups. Then, I worked with a group of students on a project to assess the socio-political crisis and the migrant influx in Venezuela through the blogosphere. I presented two conference papers of which their traveling cost was supported by this grant. I also attended all projects meetings.

7. Cyber-collective Movements: Novel Socio-computational Approaches in Studying the Blogosphere.

The research project is funded in part by the U.S. National Science Foundation's (NSF) Social-Computational Systems (SoCS) Program and Human-Centered Computing (HCC) Program.

Award number: IIS-1110868 and IIS-1110649.

Total award amount: \$742,044.

Project Period: 09/01/2011 - 05/31/2016.

Collaborators: Rolf T. Wigand and Merlyna Lim.

My role in this project:

I was hired by this grant to do theoretical survey of different cyber collective actions/phenomenon's and develop theoretical models. I presented two conference papers of which their traveling cost was supported by this grant. I also helped in writing project progress reports, presented the results of the research to program managers, and attended all projects meetings.

8. Predictive Modeling of Cyber Flash Mobs: Understanding Emerging Socio-Technical Behaviors for Conflict Monitoring.

This project is funded by the U.S. Office of Naval Research (ONR) under Thrust Code 341.

Award number: N00014-14-1-0489.

Program Officer: Dr. Rebecca Goolsby.

Total award amount: \$160,000.

Project Period: 05/01/2014 - 09/30/2015.

My role in this project:

I was hired by this grant to do research on the usage of social media by different hacker's groups. Then, I worked with a group of students on a project to assess the socio-political crisis and the migrant influx in Venezuela through the blogosphere. I presented two conference papers of which their traveling cost was supported by this grant. I also attended all projects meetings.

9. BlogTrackers: Analyzing Social Media for Cultural Modeling.

The research project is funded by the U.S. Office of Naval Research (ONR)

Award number: N00014-10-1-0091.

Total award amount: \$334,791.

Project period: 05/01/2010 - 12/30/2013.

Collaborators: Huan Liu and Merlyna Lim.

My role in this project:

I was hired by this grant to do research on ISIL/ISIS/Daesh online behaviors, then I presented three papers of which their traveling cost was supported by this grant. I also helped in writing project progress reports, presented the results of the research to program managers, and attended all projects meetings.

10. **A Socio-computational Model for 'Social Bot' Detection: Understanding tactical and strategic information maneuvers through social media to advance cyber operations.**

The research project is funded by the U.S. Department of Navy's (DoN) Small Business Technology Transfer (STTR)

Award number (Phase-1 grant): N00014-15-P-1187

Total award amount: \$150,000.

Project Period: 08/01/2015 - 08/31/2016.

Collaborators: Intelligent Automation, Inc.

My role in this project:

I was hired by this grant to do research on the usage of social media by different hacker's groups. Then, I worked with a group of students on a project to assess the socio-political crisis and the migrant influx in Venezuela through the blogosphere. I presented two conference papers of which their traveling cost was supported by this grant. I also attended all projects meetings.

Services

Service to the Profession:

- **Editorial Board Member**

1. International Journal of Computer Science Research.

- **Journal Reviewer**

1. Springer Journal of Social Network Analysis and Mining (SNAM)
2. IEEE Transactions on Computational Social Systems
3. IEEE Internet Computing.
4. IEEE Communications Magazine.
5. Information Processing and Management.
6. Computational and Mathematical Organization Theory (CMOT).
7. International Journal of Information Technology & Decision Making.
8. ACM Journal of Data and Information Quality (JDIQ).
9. Encyclopedia of Social Network Analysis and Mining (ESNAM).
10. American Journal of Mathematical and Management Sciences.
11. The Social Networks Journal.

- **Conference Program/Steering Committee Member**

1. CySoc 2023: International Workshop on Cyber Social Threats.
2. ICIW 2023: The Eighteenth International Conference on Internet and Web Applications and Services.
3. SBP-BRiMS 2022: International Conference on Social Computing, Behavioral-Cultural Modeling & Prediction and Behavior Representation in Modeling and Simulation.
4. HICSS 2022: The Hawaii International Conference on System Sciences.
5. SOTICS 2022: The Twelfth International Conference on Social Media Technologies, Communication, and Informatics.

6. CySoc 2022: International Workshop on Cyber Social Threats.
7. SOCIETY TRENDS 2022: International Conference on Technical Advances and Human Consequences. I am one of the 4 members of the steering committee. I helped creating the website content and disseminate the call for papers on multiple listservs. The conference was held from July 24, 2022, to July 28, 2022, in Nice, Saint-Laurent-du-Var, France.
8. ICIW 2022: The Seventeenth International Conference on Internet and Web Applications and Services.
9. SOTICS 2022: The Twelve International Conference on Social Media Technologies, Communication, and Informatics.
10. IEEE Big Data 2021: the 2021 IEEE International Conference on Big Data. [I Co-Chair the Workshop on Deviant Activities on Social Media \(DEVIANCE 2021\).](#)
11. SOTICS 2021: The Eleventh International Conference on Social Media Technologies, Communication, and Informatics.
12. SBP-BRiMS 2021: International Conference on Social Computing, Behavioral-Cultural Modeling & Prediction and Behavior Representation in Modeling and Simulation.
13. HICSS-54 2021: the 54th Hawaii International Conference on System Sciences.
14. IEEE Big Data 2020: the 2020 IEEE International Conference on Big Data. [I Co-Chair the Workshop on Deviant Activities on Social Media \(DEVIANCE 2020\).](#)
15. ICWSM 2020: the 14th International Conference on Web and Social Media.
16. SBP-BRiMS 2020: Social Computing, Behavioral Modeling, and Prediction.
17. SBP-BRiMS 2019: Social Computing, Behavioral Modeling, and Prediction.
18. IMMM 2019: International Conference on Advances in Information Mining and Management.
19. HUSO 2019: The International Conference on Human and Social Analytics.
20. WSDM 2018: International Conference on Web Search and Data Mining.
21. ACIS 2018: The Australasian Conference on Information Systems.
22. SBP-BRiMS 2016: Social Computing, Behavioral Modeling, and Prediction.
23. SBP-BRiMS 2015: Social Computing, Behavioral Modeling, and Prediction.

Other Services:

- **External reviewer** September 27, 2019
 - Served as an external reviewer of the Ph.D. dissertation titled "*On Meta-Networks, Deep Learning, Time and Jihadism*". Transcrime: Joint Research Centre on Transnational Crime. The International Ph.D. in Criminology at Università Cattolica del Sacro Cuore of Milan, Italy.
 - Served as an external reviewer for a Book submitted to Springer. [Springer expressed their appreciation for my review by sending me books of my choice for a total list price value of up to EUR 200. I submitted my review to Springer on December 5, 2019.](#)
- Served as a **Dissertation Committee Member** for the following students:
 - 1) **Billy Spann, Ph.D.,** Spring 2022
The Department of Information Science at UA-Little Rock, *Little Rock, AR*
 Dissertation Title: "*A Computational Framework For Assessing Connective Action Behavior Of Cyber Crowds In Social Media*"
 - 2) **Thomas Marcoux, Ph.D.,** Spring 2022
The Department of Information Science at UA-Little Rock, *Little Rock, AR*
 Dissertation Title: "*A Framework To Evaluate Trustworthiness In Online Video-Based Information Environments*"
 - 3) **Mustafa Alassad, Ph.D.,** Spring 2022
The Department of Information Science at UA-Little Rock, *Little Rock, AR*
 Dissertation Title: "*Advance In Contextualizing Focal Structure Sets In Social Network Analysis*"

- 4) **Maryam Maleki, Ph.D.,** Summer 2022
The Department of Information Science at UA-Little Rock, Little Rock, AR
 Dissertation Title: "Towards Epidemiological Modeling to Study the Propagation of Misinformation on Social Media"
- 5) **Tuja Khaund, Ph.D.,** Spring 2021
The Department of Information Science at UA-Little Rock, Little Rock, AR
 Dissertation Title: "Leveraging Social Network Analysis to Study Coordination in Online Information Campaigns"
- 6) **Abdullah Al Faysal, MS.,** Summer 2020
The Department of Information Science at UA-Little Rock, Little Rock, AR
 Project Title: "Using YouTube Trending Videos to Predict the Population Distribution by Nationality for a Region"
- 7) **Adewale Muyiwa Obadimu, Ph.D.,** Summer 2020
The Department of Information Science at UA-Little Rock, Little Rock, AR
 Dissertation Title: "Assessing the Role of Social Media Platforms in the Propagation of Toxicity"
- 8) **Muhammad Nihal Hussain, Ph.D.,** Fall 2019
The Department of Information Science at UA-Little Rock, Little Rock, AR
 Dissertation Title: "Role of Multiple Social Media Platforms in Disinformation Campaigns"
- 9) **Hayder Al Rubaye, MS.,** Summer 2019
The Department of Applied Sciences at UA-Little Rock, Little Rock, AR
 Project Title: "Designing YouTube Tracker Interface"
- **Served as a Judge for Boosting Engineering Science and Technology (BEST) competition** to help middle and high school students interested in engineering careers November 4, 2017
University of Arkansas at Little Rock
 - **Served as a Judge for the Central Arkansas Regional Science & Engineering Fair (CARSEF) and the Intel International Science & Engineering Fair (Intel ISEF),** received certificate of "Appreciation for Outstanding Performance and Voluntary Contribution" February 28, 2014
University of Arkansas at Little Rock

Awards and Honors

Awards:

1. **Received a "Thank You for Contributing a Book Chapter Letter"** October 26, 2018
Lieutenant General Michael D. Lundy, U.S. Army Commanding. The letter was sent along with a 7-volume set of books in recognition of my scholarship and as a token of appreciation.
2. **Won the "Best Paper Award"** October 14, 2018
International Academy, Research and Industry Association (IARIA). The Eighth International Conference on Social Media Technologies, Communication, and Informatics for the publication titled "Understanding Digital Ethnography: Socio-computational Analysis of Trending YouTube Videos".
3. **Staff Achievement Award for "Educational Achievements"** April 20, 2018
The 2018 Staff Awards Ceremony, University of Arkansas at Little Rock.
4. **1st Place Technology Category on the Project "Analyzing Social Bots and their Coordination During Crisis Weather Events"** May 2, 2018
University of Arkansas at Little Rock. During the 2018 Student Research and Creative Works Showcase.
5. **Won the "Best Paper Award"** October 12, 2017
International Academy, Research and Industry Association (IARIA). The Seventh International

Conference on Social Media Technologies, Communication, and Informatics for the publication titled "Assessing Situation Awareness through Blogosphere: A Case Study on Venezuelan Socio-Political Crisis and the Migrant Influx".

6. **Excellence in Research Award** May 2, 2017
Department of Information Science, in the 2nd Annual EIT (Engineering and Information Technology) Open House. University of Arkansas at Little Rock.
7. **2nd Place "Most Innovative" Award (\$100)** May 2, 2017
Kinco Constructors, in the 2nd Annual EIT (Engineering and Information Technology) Open House. University of Arkansas at Little Rock.
8. **2nd Place "Societal Impact" Award (\$50)** May 2, 2017
College of Engineering and Information Technology, in the 2nd Annual EIT (Engineering and Information Technology) Open House. University of Arkansas at Little Rock.
9. **Outstanding Graduating Student Award (Master's Level)** May 5, 2015
College of Arts, Letters, and Sciences (CALS) at University of Arkansas at Little Rock.
10. **Who's Who Among Students in American Universities and Colleges** Spring 2015
University of Arkansas at Little Rock
11. **Chancellor's List and Dean's List** Fall 2010, Spring 2011, Spring 2012
University of Arkansas at Little Rock
12. **Teaching Enhancements Affecting Minority Students Scholarship** Fall 2011, Spring 2012
University of Arkansas at Little Rock

Travel Awards:

1. **SBP-BRiMS2021 Conference Registration Award** July 5, 2021
Social Computing, Behavioral Modeling, and Prediction Conference
2. **SBP-BRiMS2017 Student Travel Award** July 5, 2017
Social Computing, Behavioral Modeling, and Prediction Conference
3. **ICDM 2015- Student Travel Award** November 14, 2015
The IEEE International Conference on Data Mining
4. **EIT Student Travel Award** November 14, 2015
College of Engineering and Information Technology, UALR
5. **SBP-BRiMS2015 Student Travel Award** April 3, 2015
Social Computing, Behavioral Modeling, and Prediction Conference
6. **Graduate School Student Travel Award** Spring 2015
Graduate School –University of Arkansas at Little Rock

Other Honors:

1. **The Information Science Department's Graduate Student Representative, EIT Dean's Student Leadership Board** 2017-2018
University of Arkansas at Little Rock
2. **Certificate of Perfect Attendance** Fall 2009, Spring 2010
IELP, University of Arkansas at Little Rock

Skills

Languages:

- Arabic: Fluent/Native
- English: Proficient
- French: Basic/Familiarity

Programming Languages:

- HTML5 & CSS3, JavaScript, PHP, SQL, Python.

Software:

- Oracle Enterprise Manager Security tool, Microsoft WebMatrix, Apache HTTP Server, File Zilla Client, Apache, Microsoft Visual Studio C++, WinRDBI, My SQL Work Bench, PLC Allen Bradley, Electronics Workbench, AutoCAD, MultiSIM, NodeXL, Gephi, Cytoscape, IBM Watson Analytics, ORA LITE, Stanford Topic Modeling Toolbox or "TMT", Weka, Tableau Public.

Training Certificates:

- CITI Group 2: Social & Behavioral Research**
Creighton University Passed on August 14, 2022
- CITI Responsible Conduct of Research Course, CITI Program Certificate.**
Creighton University Passed on March 10, 2022
- Conflicts of Interest, CITI Program Certificate.**
Creighton University Passed on January 20, 2022
- Social and Behavioral Responsible Conduct of Research, CITI Program Certificate.**
University of Arkansas at Little Rock October 30, 2017
- Social and Behavioral Research Investigators and Key Personnel, CITI Program Certificate.**
University of Arkansas at Little Rock October 30, 2017
- Introduction to Data Analysis with Demos.**
Big Data University March 16, 2016
- Using BigSheets for Spreadsheet-like Analytics.**
Big Data University March 15, 2016
- Watson Analytics Fundamentals (WA001EN).**
Big Data University March 11, 2016
- Hadoop Fundamentals I.**
Big Data University February 4, 2016
- Introduction to R Programming.**
DataCamp January 25, 2016
- Introduction to NoSQL and DBaaS.**
Big Data University January 18, 2016
- Big Data Fundamentals.**
Big Data University January 17, 2016
- Data Science Methodology.**
Big Data University January 16, 2016
- Certificate of Training Center for Computational Analysis of Social and Organizational Systems (CASOS) 2015 Summer Institute.**
Carnegie Mellon University (CMU) July 5 - 12, 2015
- Certificate of Training Green Dot Student Bystander.**
University of Arkansas at Little Rock November 9, 2013

Organizations

Social Cybersecurity Working Group	2019-Present
European Alliance for Innovation (EAI)	2014-Present
Institute of Electrical and Electronics Engineers (IEEE)	2013-Present
The Honor Society of Phi Kappa Phi	2012-Present

Selected Media Coverage & Interaction

1. Article entitled "UA-Little Rock Partnering in \$660,000 Department of Defence Grant" [UA Little Rock Press Release - September 7, 2022]
2. News Coverage "Creighton University professors and students study online mobs" [OMAHA, Neb. (WOWT) - August 19, 2022]
3. Article entitled "Creighton researcher awarded \$585K Air Force grant to study internet mobs" [Omaha World-Herald - August 13, 2022]
4. Article entitled "Air Force tasks Creighton profs, undergrads with researching online mobs" [Creighton News - August 1, 2022]
5. Article entitled "Al-khateeb Publishes Article in Social Network Analysis and Mining Multidisciplinary Journal" [Creighton Today - October 18, 2021]
6. Article entitled "Al-khateeb Publishes Computer Science Research Article, Speaks at International Conference" [Creighton Today - July 20, 2021]
7. Article entitled "Al-khateeb's Book Receives Positive Review from Journal" [Creighton Today - February 25, 2021]
8. Article entitled "Al-khateeb Published in Journal of Computational and Mathematical Organization Theory" [Creighton Today on July 26, 2019]
9. Article entitled "Al-Khateeb Publishes Book on Social Cyber Forensic Analysis" [Creighton Today on April 18, 2019]
10. Article entitled "How to Spot 'Fake News'" [Creighton Magazine, 2019]
11. Article entitled "Creighton Professor Dedicated to Rooting Out Social Media's Trolls" [Creighton University Press Release on December 4, 2018].
12. Article entitled "Al-Khateeb Published Two Papers at 2018 International Conference on Advances in Social Networks Analysis and Mining (ASONAM)" [Creighton University Press Release on November 2, 2018].
13. Article entitled "UA Little Rock Paper Wins Award at International Conference for Research on Tracking Disinformation Campaigns Through Social Media" [UA Little Rock Press Release on August 22, 2018].
14. Article entitled "On the Front Line: UA Little Rock Students Work with Information Science Professor to Create Social Media Research Group" [Research in the Rock - Fall 2018]
15. Article entitled "Social Bots Disrupt Online Communication About Natural Disasters" [UA Little Rock Press Release - May 24, 2018].
16. Article entitled "UA Little Rock Honors Staff Members for Their Achievements" [UA Little Rock Press Release - April 24, 2018].
17. Article entitled "Research Explore How Online Narratives on Refugees Shift Over Time" [UA Little Rock Press Release - March 27, 2018].
18. Article entitled "Team COSMOS wins the best paper award at conference" [UA Little Rock Press Release - December 5, 2017].
19. Article entitled "UA Little Rock Doctoral Student Presents Research on Social Cyber Forensics" [UA Little Rock Press Release - September 27, 2017].
20. Article entitled "Military Supports Research at UALR" [Arkansas Democrat Gazette - June 11, 2017].
21. Article entitled "Agarwal Addresses NATO Meeting on Dangers of Information Dissiminated by Botnets" [UA Little Rock Press Release - May 4, 2017] [NewsWise]
22. Article entitled "UALR Professor Monitors ANTI-NATO Narratives For Operation Brilliant Jump" [UA Little Rock Press Release - June 14, 2016]

23. Article entitled "Graph Visualizes Thousands of Tweets about Apple and #NoBackDoor" [UNH Press Release - February 22, 2016] [UNHcFREG Blog] [Fox61 Coverage - February 25, 2016]
24. Article entitled "Meet Samer Al-khateeb '13, '15 B.S. in Computer Science, M.S. in Applied Science" [Research in the Rock - Fall 2015]
25. Article entitled "Agarwal and Students Present Research at Stanford-Hosted Symposia" [UA Little Rock Press Release - April 20, 2015]
26. Article entitled "Study Demonstrates the Power of Social Media for Terror Propaganda" [UA Little Rock Press Release - October 1, 2014] [Phys.Org]