Jeongkeun Shin

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🏫 EDUCATION

Doctor of Philosophy (Ph.D.) in Societal Computing   Sep 2024 – Now
Center for Computational Analysis of Social and Organizational Systems (CASOS)   Pittsburgh, PA
Software and Societal Systems Department, School of Computer Science, Carnegie Mellon University
Advisor : Professor Kathleen M. Carley

Master of Science (M.S.) in Societal Computing   Sep 2024 – Now
Center for Computational Analysis of Social and Organizational Systems (CASOS)   Pittsburgh, PA
Software and Societal Systems Department, School of Computer Science, Carnegie Mellon University
Advisor : Professor Kathleen M. Carley

Doctor of Philosophy (Ph.D.) in Electrical and Computer Engineering   Jan 2022 – Aug 2024
Center for Computational Analysis of Social and Organizational Systems (CASOS)   Pittsburgh, PA
Department of Electrical and Computer Engineering, Carnegie Institute of Technology, Carnegie Mellon University
Advisor: Professor Kathleen M. Carley
Completed Coursework Requirements / Transferred to Software and Societal Systems Department

Master of Science (M.S.) in Electrical and Computer Engineering   Jan 2020 – May 2021
CyLab Biometrics Center   Pittsburgh, PA
Department of Electrical and Computer Engineering, Carnegie Institute of Technology, Carnegie Mellon University
Advisor: *Professor Marios Savvides*

Bachelor of Science in Engineering (B.S.E.) in Computer Science   Class of 2019
Crowd+Machine (CroMa) Lab & Illinois Geometry Lab   Ann Arbor, MI
College of Engineering, University of Michigan
Advisor: *Professor Walter S. Lasecki* & *Professor Xin Zhang @ UIUC*

📜 PUBLICATIONS

Conference Proceedings

[C.5] Shin, J., Carley, K. M., & Carley, L. R. (2024, May). Simulation-Based Study on False Alarms in Intrusion Detection Systems for Organizations Facing Dual Phishing and DoS Attacks. In *2024 Annual Modeling and Simulation Conference (ANNSIM)* Forthcoming. IEEE.
🏆 **Best Paper Runner Up Award**

[C.4] Shin, J., Carley, K. M., & Carley, L. R. (2023, September). Integrating Human Factors into Agent-Based Simulation for Dynamic Phishing Susceptibility. In *International Conference on Social Computing, Behavioral-Cultural Modeling and Prediction and Behavior Representation in Modeling and Simulation* (pp. 169-178). Cham: Springer Nature Switzerland.

[C.3] Shin, J., Carley, L. R., Dobson, G. B., & Carley, K. M. (2023, December). Beyond Accuracy: Cybersecurity Resilience Evaluation of Intrusion Detection System against DoS Attacks using Agent-based Simulation. In *2023 Winter Simulation Conference (WSC)* (pp. 118-129). IEEE.

[C.2] Shin, J., Carley, L. R., Dobson, G. B., & Carley, K. M. (2023, May). Modeling and simulation of the human firewall against phishing attacks in small and medium-sized businesses. In *2023 Annual Modeling and Simulation Conference (ANNSIM)* (pp. 369-380). IEEE.

[C.1] Shin, J., Dobson, G. B., Carley, K. M., & Carley, L. R. (2022, September). OSIRIS: organization simulation in response to intrusion strategies. In *International Conference on Social Computing, Behavioral-Cultural Modeling and Prediction and Behavior Representation in Modeling and Simulation* (pp. 134-143). Cham: Springer International Publishing.

Posters / Extended Abstracts

[P.2] Shin, J., Dobson, G. B., Carley, K. M., & Carley, L. R. (2022, December). Leveraging OSIRIS to simulate real-world ransomware attacks on organization. In *2022 Winter Simulation Conference (WSC) Poster Session.*

[P.1] Shin, J., Xu, Y., Zhang, C., Zhang, X., & Li, J. (2017, May). Finding integers from group orbits. Illinois Geometry Lab (IGL) Spring 2017 Open House

Technical Reports

[T.1] Shin, J., Dobson, G. B., Carley, L. R., & Carley, K. M. (2023, December). Revelation of System and Human Vulnerabilities Across MITRE ATT&CK Techniques with Insights from ChatGPT. In CASOS Technical Report

🏆 AWARDS & ACHIEVEMENTS

2023 Annual Modeling and Simulation Conference (ANNSIM) Best Paper Runner Up Award

👥 MENTORING

June 2024 – July 2024   Tanav Changal · Summer Internship · Troy High School

May 2023 – August 2023   Devashish Ubale · MITS Program Summer Internship · Master of Information Technology Strategy (MITS), Carnegie Mellon University · First Position: FPrime AI

📋 ACADEMIC SERVICES

Peer Review

📄 2024 Annual IDeaS Conference: Disinformation, Hate Speech, and Extremism Online

📄 2024 International Conference on Social Computing, Behavioral-Cultural Modeling and Prediction and Behavior Representation in Modeling and Simulation (SBP-BRiMS)

📄 2024 Winter Simulation Conference (WSC) Agent-Based Simulation Track