# JEONGKEUN SHIN

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🏡 jeongkeunshin.github.io



Doctor of Philosophy (Ph.D.) in Societal Computing Sep 2024 - Now Software and Societal Systems Department, School of Computer Science, Carnegie Mellon University Pittsburgh, PA Advisor: Professor Kathleen M. Carley

Master of Science (M.S.) in Societal Computing Sep 2024 - Now Software and Societal Systems Department, School of Computer Science, Carnegie Mellon University Pittsburgh, PA Advisor: Professor Kathleen M. Carley

Doctor of Philosophy (Ph.D.) in Electrical and Computer Engineering Jan 2022 - Aug 2024 Department of Electrical and Computer Engineering, Carnegie Institute of Technology, Carnegie Mellon University Pittsburgh, PA 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 Department of Electrical and Computer Engineering, Carnegie Institute of Technology, Carnegie Mellon University Pittsburgh, PA Advisor: Professor Marios Savvides

Bachelor of Science in Engineering (B.S.E.) in Computer Science Class of 2019 College of Engineering, University of Michigan Ann Arbor, MI Advisor: Professor Walter S. Lasecki & Professor Xin Zhang @ UIUC

## 📜 PUBLICATIONS

#### **Conference Proceedings**

- 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
- 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.
- 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.
- 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.
- 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

- 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.
- 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**

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

Devashish Ubale · MITS Program Summer Internship · Master of Information Technology Strategy (MITS), Carnegie May 2023 - August 2023

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