Benjamin Ampel

bampel@email.arizona.edu
benampel.github.io

Department of Management Information Systems   Eller College of Management
University of Arizona McClelland Hall   1130 E. Helen Street Tucson, AZ 85721

EDUCATION

Ph.D., Management Information Systems (MIS), University of Arizona, Expected 2023
- **Advisor:** Dr. Hsinchun Chen
- **Minor**: Cognitive Science

M.S., Management Information Systems (MIS), University of Arizona, 2019
B.S., Management Information Systems (MIS), University of Arizona, 2017

PUBLICATIONS

Journal Papers
1. N/A

Working Journal Papers
1. **B. Ampel**, S. Samtani, H. Zhu, and H. Chen "Labeling Hacker Exploits for Proactive Cyber Threat Intelligence: An Explainable Deep Transfer Learning Approach," **Under Second Round Review at Management Information Systems Quarterly (MISQ).**
2. **B. Ampel** and S. Ullman, "Why Following Friends Can Hurt You: A Replication Study," **Under First Round Review at Transactions on Replication Research**
3. **B. Ampel**, S. Samtani, H. Zhu, and H. Chen "Linking Hacker Exploits to a Cybersecurity Risk Management Framework: A Knowledge Distillation Approach," **Targeted at Management Information Systems Quarterly (MISQ).**
4. S. Samtani and **B. Ampel**, "A Survey of Opportunities for Developing Dark Web-Based Cyber Threat Intelligence Systems" **Targeted at Computers and Security.**

Refereed Conference Proceedings
1. T. Vahedi, **B. Ampel**, S. Samtani, and H. Chen, "Identifying and Categorizing Malicious Content on Paste Sites: A Neural Topic Modeling Approach," Proceedings of 2021 IEEE International Conference on Intelligence and Security Informatics (ISI), San Antonio, Texas, November 2021.
2. K. Otto, **B. Ampel**, S. Samtani, H. Zhu, and H. Chen, "Exploring the Evolution of Exploit-Sharing Hackers: An Unsupervised Graph Embedding Approach," Proceedings of 2021 IEEE International Conference on Intelligence and Security Informatics (ISI), San Antonio, Texas, November 2021.
3. **B. Ampel** and H. Chen, "Distilling Contextual Embeddings into A Static Word Embedding For Improving Hacker Forum Analytics," Proceedings of 2021 IEEE International Conference on Intelligence and Security Informatics (ISI), San Antonio, Texas, November 2021.
4. **B. Ampel**, S. Samtani, H. Zhu, S. Ullman, and H. Chen, "Labeling Hacker Exploits for Proactive Cyber Threat Intelligence: A Deep Transfer Learning Approach," Proceedings of 2020 IEEE International Conference on Intelligence and Security Informatics (ISI), Washington, D.C., November 2020 *(Recipient of Best Paper Award)*.
5. S. Ullman, S. Samtani, B. Lazarine, H. Zhu, **B. Ampel**, M. Patton, and H. Chen, "Smart Vulnerability Assessment for Scientific Cyberinfrastructure: An Unsupervised Graph Embedding Approach," Proceedings of 2020 IEEE International Conference on Intelligence and Security Informatics (ISI), Washington, D.C., November 2020.
6. B. Lazarine, S. Samtani, M. Patton, H. Zhu, S. Ullman, **B. Ampel**, and H. Chen, "Identifying Vulnerable GitHub Repositories and Users in Scientific Cyberinfrastructure: An Unsupervised Graph Embedding Approach," Proceedings of 2020 IEEE International Conference on Intelligence and Security Informatics (ISI), Washington, D.C., November 2020.
7. **B. Ampel**, M. Patton and H. Chen, "Performance Modeling of Hyperledger Sawtooth Blockchain," Proceedings of 2019 IEEE International Conference on Intelligence and Security Informatics (ISI), Shenzhen, China, July 2019.

Refereed Workshop Papers (No Proceedings)
1. **B. Ampel**, S. Samtani, S. Ullman, and H. Chen, "Linking Common Vulnerabilities and Exposures to the MITRE ATT&CK Framework: A Self-Distillation Approach," ACM KDD Workshop on AI-enabled Cybersecurity Analytics, Virtual Event, August. 2021.

PROFESSIONAL ACTIVITIES

Ad-hoc Reviewer of Journal Papers (2 total)
Transactions on Dependable and Secure Computing (TDSC), 2021; ACM Transactions on Management Information Systems (TMIS), 2019.

Ad-hoc Reviewer of Refereed Conference Proceedings (7 total)
Hawaii International Conference on System Sciences (HICSS), 2021; Pacific Asia Conference on Information Systems (PACIS), 2021; International Conference on Information Systems (ICIS), 2021; IEEE Deep Learning and Security Workshop (DLS), 2020; Pacific Asia Conference on Information Systems (PACIS), 2020; International Conference on Information Systems (ICIS), 2020; ICDM Workshop on Deep Learning for Cyber Threat Intelligence (DL-CTI), 2020.

Conference Program Committees (3 total)
ICDM Data Mining for Cybersecurity, 2021; ACM Conference on Computer and Communications Security (CCS) AISec Workshop, 2021; Workshop on Artificial Intelligence-enabled Cybersecurity Analytics (AI4Cyber-KDD), 2021.

Masters and Undergraduate Mentoring (5 total)
Jessica Diep, UArizona MSMIS (2021 – Present); Thomas O'Kane, UArizona MSMIS (2021 – Present); Kaeli Otto, UArizona MSMIS (2020 – 2022); Tala Vahedi, UArizona MSMIS (2020 – 2022); Ben Lazarine, UArizona MSMIS (2019 – 2021).

HONORS & AWARDS
- Best Paper Award. IEEE Intelligence and Security Informatics (ISI) (2020)
- Nunamaker-Chen MIS Doctoral Scholarship Recipient (2020)
- CyberCorps: Scholarship for Service Fellow (2018-2021)
- MIS Undergraduate Outstanding Senior (2017)
- William and Florence Schmidt Scholarship Recipient (2017)
- Eller Business School Circle of Excellence Inductee (2017)

TEACHING EXPERIENCE

Course	Method	Semester	# Students	Location	Teaching Score
MIS562: Cyber Threat Intelligence	Online	Fall 2021	13	UArizona	In Progress
MIS562: Cyber Threat Intelligence	Online	Summer 2021	30	UArizona	4.00/5

CERTIFICATIONS
- CNSS 4011 - Information Systems Security Professionals
- CNSS 4012 - Senior Systems Managers
- CNSS 4013 - System Administrators
- CNSS 4016 - Risk Analyst

WORK EXPERIENCE

MITRE   **Bedford, Massachusetts**
Cyber Assessment Intern   May 2019 – August 2019

Pima County   **Tucson, Arizona**
IT Service Support Specialist   February 2018 – June 2018

SponsorUnited   **Tucson, Arizona**

PERSONAL

- **Research Focus:** Data mining of Dark Net Markets / Hacker Forums
- Security Clearance (DoD Secret, effective 2019)