Souradip Nath

Doctor of Philosophy, Computer Science School of Computing and Augmented Intelligence 699 S Mill Ave, Tempe, AZ, 85281



Research Interests

Access Control and Authorization; Human Factors in Security and Privacy; Digital Forensics

EDUCATION

Arizona State University

Tempe, AZ, USA

Ph.D. in Computer Science, Advisor: Dr. Gail-Joon Ahn, GPA: 4.00/4.00

In Progress

Indian Institute of Engineering Science and Technology, Shibpur

Howrah, India

B.Tech. in Information Technology, GPA: 9.93/10.00, First Class with Honors

2018 - 2022

- Capstone: "Development of an Online Document Tracking System", Advisor: Dr. Indrajit Banerjee

- Capstone: "Development of an Academic Search Engine", Advisor: Dr. Arindam Biswas

2022 2021

Research Experience

Global Security Initiative, Arizona State University

Tempe, AZ, USA Spring 2023-Current

Graduate Research Assistant, Advisor: Dr. Gail-Joon Ahn

- Working towards the design and development of a Collaboration-aware Access Management Framework for Scientific Resource Sharing and Privilege Management
- Performed a qualitative study involving researchers and system administrators to derive security requirements
- Surveyed different Access Control Models to examine their applicability to scientific resource access management in large-scale cyberinfrastructures

Indian Institute of Engineering Science and Technology, Shibpur

Howrah, India Summer 2020

Summer Research Intern, Advisor: Dr. Ruchira Naskar

- Researched "Image Splicing Detection using Deep Neural Networks" with a Proof of Concept implemented using Python frameworks Keras, and Tensorflow
- Proposed a novel Neural Network to classify authentic and spliced images with more than 97% accuracy

PUBLICATIONS

- S. Nath, A. Soneji, J. Baek, T. Bao, A. Doupé, C. Rubio-Medrano, and G.-J. Ahn, ""It's almost like Frankenstein": Investigating the Complexities of Scientific Collaboration and Privilege Management within Research Computing Infrastructures", in 2025 IEEE Symposium on Security and Privacy (SP), IEEE Computer Society, 2025, pp. 2995–3013.
- S. Nath, K. Summers, J. Baek, and G.-J. Ahn, "Digital Evidence Chain of Custody: Navigating New Realities of Digital Forensics", in 2024 6th IEEE International Conference on Trust, Privacy and Security in Intelligent Systems and Applications (TPS-ISA), IEEE, 2024.
- S. Nath and R. Naskar, "Automated image splicing detection using deep CNN-learned features and ANN-based classifier", Signal, Image and Video Processing, vol. 15, pp. 1601–1608, 2021.

Industry Experience

Deutsche Bank
Pune, India

Technology Analyst Intern

Summer 2021

Utilized Python Pandas library to clean large datasets of scheduled jobs, conducted data analysis, and came up
with an optimization algorithm for job scheduling using the Greedy algorithm

 Collaborated with a team of 3 and proposed a general framework for identifying an optimized job scheduling against a multi-parameter cost function

TEACHING EXPERIENCE

Teaching Assistant: Computer and Network Forensics, ASU, with Dr. Jaejong Baek

Fall 2024

Posters

- S. Nath, A. Soneji, J. Baek, T. Bao, A. Doupé, C. Rubio-Medrano, G. Ahn, "It's almost like Frankenstein": Investigating the Complexities of Scientific Collaboration and Privilege Management within Research Computing Infrastructures', in 2025 IEEE Symposium on Security and Privacy (SP), 2025. [pdf]
- R. Dhuri, A. Soneji, and S. Nath, "When you are younger, you care less about privacy and security": Exploring young adults' maturation toward social media safety and privacy, in *Cybersecurity and Trusted Foundations Summer High School Internship*, Arizona State University, 2024. [pdf]
- D. Moola, A. Soneji, and S. Nath, "What you put on the internet lives forever": Analyzing Social Media Safety and Privacy Advice from Online Community Platforms, in Cybersecurity and Trusted Foundations Summer High School Internship, Arizona State University, 2024. [pdf]
- S. Nath, A. Soneji, GJ. Ahn, J. Baek, C. E. Rubio-Medrano, "ScienceAccess: Towards Robust and Usable Access Control for Large-Scale Research Computing Infrastructures", in NSF CICI PI Meeting, Arizona State University, 2024. [pdf]

ACADEMIC SERVICES

- Organizing Committee Member (Web Chair), ACM SACMAT'25

2025

- External Peer Reviewer: ASIACCS'25, CODASPY'25, SACMAT'24-25, CSET'24, MTA

2024-2025

MENTORSHIP EXPERIENCE

- Riya Dhuri, **High School Intern**, BASIS Chandler High School, Arizona

Summer 2024

- * Conducted a retrospective study exploring young adults' maturation toward social media safety and privacy
- * ASU: High School Internship, Cybersecurity and Trusted Foundations
- Deepika Moola, **High School Intern**, Pinnacle High School, Arizona

Summer 2024

- * Conducted a mixed methods analysis understanding how people on the internet talk about online safety and privacy, by exploring several subreddits including r/privacy, r/cybersecurity, r/redscarepod, etc.
- * ASU: High School Internship, Cybersecurity and Trusted Foundations
- Sri Varsha Nagulanchi, Master of Science, Texas A&M University-Corpus Christi

Spring 2024

SCHOLARSHIPS AND AWARDS

- President of India Gold Medal, University Topper (Undergraduate)	Dec 2022
- IIEST Silver Medal, Department Topper (Information Technology)	Dec 2022
- ASU New American University Scholarship	Aug 2022
– Swami Vivekananda West Bengal Government Merit Scholarship	Aug 2018
- G.P Birla Merit Scholarship	Aug 2018
– State Board Topper – West Bengal Council of Higher Secondary Exam	Jun 2018
- State Board Topper - West Bengal Board of Secondary Exam	May 2016

EXTRACURRICULAR ACTIVITIES

- Member, Fulton Academic Integrity Matters (FAIM) Program, ASU Tempe Fall 2023—Current Served on the academic integrity appeal hearing committee alongside esteemed faculty members.
- Member, Programming and Activities Board (PAB), ASU Tempe Fall 2023—Spring 2024 Contributed to the success of numerous vibrant college events as an integral member of the organizing committee.
- Member, Senate Undergraduate Committee (SUGC), IIEST, Shibpur Fall 2019–Spring 2022 Played an integral role in the committee dedicated to addressing a range of academic issues.