

# SASWAT DAS

Bhubaneswar, OD, India · +91 637 014 7889 · +1 315 886 5504

[saswat.das@niser.ac.in](mailto:saswat.das@niser.ac.in) · [LinkedIn](#) · [saswatdas.ml](https://saswatdas.ml) · [GitHub](#)

---

Incoming PhD Student at SEAS, University of Virginia

Research Interests: Trustworthy AI, differential privacy, fairness, adversarial ML, security

## EDUCATION

AUG 2023 - PRESENT

PH.D., SEAS, UNIVERSITY OF VIRGINIA

- Major in Computer Science
- Advisor: Dr. Ferdinando Fioretto
- Areas of Interest: Trustworthy AI, Privacy, Fairness

JUL 2018 - MAY 2023

INTEGRATED M.SC. (BS+MS), NATIONAL INSTITUTE OF SCIENCE EDUCATION AND RESEARCH (NISER), INDIA

- Major in Mathematics and Minor in CS
- BS+MS CGPA : 8.39; Master's Years CGPA: 9.29 (Indian 10-point scale)
- GPA in Computer Science : 9.44/10

APR 2011 - MAY 2018

AISSE & AISSCE (SECONDARY AND HIGH SCHOOL), DPS KALINGA, ODISHA, INDIA

- Secured 92% in AISSCE (Science Stream) (Grade 12 Exams)
- Secured 10 CGPA in AISSE (Grade 10 Matriculation Exams)
- Served as Head Boy (School Captain) (2016-2018)

## EXPERIENCE

JUNE 2022 - PRESENT

VISITING RESEARCH SCHOLAR, EECS, SYRACUSE UNIVERSITY

Mentor: Dr. Ferdinando Fioretto, EECS, Syracuse University

AUGUST 2021 - MAY 2023

STUDENT RESEARCHER, SUBHANKAR MISHRA'S LAB, SCHOOL OF COMPUTER SCIENCES, NISER

Mentor: Dr. Subhankar Mishra, School of Computer Sciences, NISER, HBNI

SEPTEMBER 2020

ATTENDEE/PARTICIPANT, SUMMER SCHOOL ON COMPUTER & CYBER SECURITY 2020, TECHNION

DEC 2019 - JAN 2020

WINTER INTERN, SCHOOL OF COMPUTER SCIENCES, NISER, BHUBANESWAR

Supervisor: Dr. Rishiraj Bhattacharyya, then at the School of Computer Sciences, NISER. Now at the University of Birmingham.

MAY 2019 - JULY 2019

SUMMER INTERN, SCHOOL OF COMPUTER SCIENCES, NISER, BHUBANESWAR

Supervisor: Dr. Rishiraj Bhattacharyya, then at the School of Computer Sciences, NISER. Now at the University of Birmingham.

## PUBLICATIONS/SUBMITTED PAPERS/PREPRINTS

- **Fair Context-Aware Privacy Threat Modelling (2022)**  
Presented at the Workshop on Privacy Threat Modeling (WPTM), USENIX - Symposium on Usable Privacy and Security (SOUPS), 2022  
<https://arxiv.org/abs/2207.09750>  
Saswat Das, Rakshit Naidu
- **Privacy and Bias Analysis of Disclosure Avoidance Systems (2023)**  
<https://arxiv.org/abs/2301.12204>  
Keyu Zhu, Ferdinando Fioretto, Pascal van Hentenryck, Saswat Das, Christine Task
- **MIPS (Membership Inference on Prototype Selection): Revealing Privacy Violations in Prototype Selection (2023)**  
Under review  
Saswat Das, Subhankar Mishra
- **Mixed Signals: Achieving Model Theft Protection by Adversarial Signal Poisoning with Differential Privacy (2023)**  
To be submitted for publication  
Saswat Das, Subhankar Mishra
- **Advances in Differential Privacy and Differentially Private Machine Learning: A Survey (2022)**  
To be submitted for publication  
Saswat Das, Subhankar Mishra

## TEACHING/EDITING/VOLUNTEERING

### SECTION LEADER, CODEINPLACE, STANFORD UNIVERSITY

APR. 2021 - MAY 2021

Served as a section leader in Stanford University's CodeInPlace programme and taught coding to a section of students from a global pool of applicants using material from the first half of Stanford University's popular course, CS106A.

### COLLEGE MATHEMATICS TUTOR, NISER, HBNI

FEB. 2021 - MAY 2021

Served as a mathematics tutor to freshmen in the spring of 2021 as part of an initiative by mathematics majors at the School of Mathematical Sciences, NISER. Helped clarify mathematical concepts, solve questions, and encouraged mathematical rigour.

### ONLINE MENTOR AND TUTOR, AVETI LEARNING

APR. 2020 - SEP. 2022

Served as an online mathematics tutor and mentor to high school students in rural Eastern India to make quality education more accessible.

### STUDENT MENTOR, AVANTI FELLOWS

SEPT 2018 - AUG 2019

Served as a mentor and mathematics tutor to high school students at JNV Dhenkanal as part of the acclaimed Avanti Fellows programme.

## REVIEWING

- AAMAS 2023 - 22<sup>nd</sup> International Conference on Autonomous Agents and Multiagent Systems

## AWARDS/HONOURS

- Shortlisted for the ELLIS Europe PhD programme (2023)
- Selected for the Winter School on Theoretical Computer Science at IIT Delhi (2022)
- Selected for the prestigious TIFR - Visiting Students' Research Programme (VSRP), 2022 in Technology & Computer Science

- **DISHA Fellowship**, Department of Atomic Energy, Government of India (2018-2023): received a scholarship for attending college which includes a monthly stipend for food and lodging and an annual contingency grant for research endeavours.
- **National Talent Search (NTS) Scholarship**, NCERT, India (2016)

## ACADEMIC/EXTRACURRICULAR POSITIONS HELD

### **STUDENT REPRESENTATIVE**, UGCS, SCHOOL OF MATHEMATICAL SCIENCES, NISER DEC. 2020 - DEC. 2022

Serving as one of two student representatives to the Undergraduate Committee of the School (UGCS) of Mathematical Sciences, NISER, and help professors design and develop the academic course structure, pedagogy, and evaluation schemes of the undergraduate programme.

### **EDITOR**, INVENTA MAGAZINE JUL. 2021 - DEC. 2021

Worked on the editorial board for Inventa, an annual national science outreach magazine published jointly by the premier public research institutes of India: NISER, CeBS, IISc, and the IISERs.

### **CLUB PRESIDENT**, QUIZONE, NISER MAY 2019 - NOV. 2021

Served as the president of Quizone, the quiz club of NISER, HBNI, for two consecutive terms. Organised and hosted quizzes (online and offline), which involved planning and running logistics, making questions, maintaining a social media presence for the club, engaging with partners and sponsors etc. Helped codify club rules and regulations by drafting a club constitution.

### **MEMBER**, CULTURAL COMMITTEE, NISER AUG 2019 - NOV. 2021

Served as a member of the cultural committee of NISER, HBNI, which is responsible for planning and organising cultural events in the college.

### **HEAD BOY (SCHOOL CAPTAIN)**, DELHI PUBLIC SCHOOL KALINGA, INDIA SEP. 2016 - JUL. 2018

Served as head boy of Delhi Public School Kalinga, in a role which involved representing the school on an interschool level, presiding over the students' council, organising events, and looking after the welfare and interests of the students of the school.

## NOTABLE SKILLS/TRAITS

- **Lingual Proficiency:** Native/Bilingual Fluency in English, Hindi, Odia, familiarity with French
- **Languages and Tools:** C++, SQL, Python, R, JavaScript, LaTeX, PyTorch, Opacus, Captum
- **Familiar with the use of Linux** (Arch and Debian based)
- **Teaching and Tutoring Experience**
- **Soft Skills:** Leadership and Team Management, Diligence, Quick Learning, Event Organisation, Public Speaking and Presentation Skills, Time Management