

Priyanka Mondal

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Education

University of California, Santa Cruz

PhD, Computer Science, GPA: 4.0/4.0

2017–2024

Indian Institute of Science, Bangalore

Master of Engineering, Computer Science, GPA: 6.7/8.0

2013–2015

Bengal Engineering and Science University, Kolkata

Bachelor of Engineering, Computer Science, *First-class with Honors*

2009–2013

Research Experience

Research Interests: Language based security, Distributed Systems, Applied Cryptography

Publications

- Flow-Limited authorization for consensus, replication, and secret sharing**
Priyanka Mondal, Maximilian Algehed and Owen Arden
Journal of Computer Security, 2023 (31st Volume)
- Applying consensus and replication securely with FLAQR** (Distinguished Paper Award)
Priyanka Mondal, Maximilian Algehed and Owen Arden
Proceedings of 35th IEEE Computer Security Foundations Symposium, CSF'22
- Vote them out: Detecting and eliminating byzantine peers** (Extended abstract)
Tuan Tran, Priyanka Mondal, Roy Shadmon, Peter Alvaro and Owen Arden
Proceedings of 10th ACM Symposium on Cloud Computing, SoCC'19

ME Thesis

Title: *Atomicity Checking with Blame Assignment for Android Applications.*

Supervisor: Prof. Aditya Kanade, Software Engineering and Analysis Lab, IISc Bangalore

Work Experience

- **Citrix R&D Pvt. Ltd, Bangalore.** Networking & Cloud team, Software Engineer II, 2015-17
 - Transmitting JSON data from Packet Engines to Amazon S3 via Unified Logger Daemon.
 - Converting HAProxy load balancer config to Netscaler load balancer config.
 - Improving Appflow collector with enhanced configuration options for HTTP, SSL, TCP, and SSLTCP flows.
 - Enhancing a Wireshark plugin for internal testing.
- **Nomura Research Institute, Kolkata.** Enterprise Data Warehouse team, Intern, May-Aug 2012
 - Automated parsing of incoming XML data packets, extracting information, and storing in the organization's database using a customized algorithm.

Skills

Programming skills: C, C++, Java, Haskell, Coq, Dafny, HTML, CSS, Python, JavaScript

Technical skills: Linux, Git, \LaTeX , GDB, Wireshark, OpenSSL, SQL, Matlab, Docker, Django

Teaching Experience

- Programming Languages, CMPS210A - UC Santa Cruz, Spring 2021, Spring 2023
- Introduction to Analysis of Algorithms, CMPS102, UC Santa Cruz, Winter 2023
- Introduction to Algorithms, CMPS101 - UC Santa Cruz, Winter 2021, Fall 2022
- Advanced Programming, CMPS109 - UC Santa Cruz, Summer 2019, Spring 2022
- Comparative Programming Languages, CMPS112 - UC Santa Cruz, Spring 2018
- Compiler Design, CMPS104 - UC Santa Cruz, Fall 2017

Selected Talks & Posters

- Applying replication and consensus securely with FLAQR - CSF'22, Haifa, Israel
- Flow Limited Authorization for Quorum Replication - PLCrypt'22, Stanford Research Inst.
- Applying replication and consensus securely with FLAQR - PLAS'21 (Virtual)
- A Language for Secure Replicated Computation (Poster & talk) - CSF'19, New Jersey
- Vote Them Out: Detecting and Eliminating Byzantine Peers(Poster) - SoCC'19, Santa Cruz

Grants and Scholarships

- Computer Security Foundations Travel Grant, 2019 and 2022
- Symposium on Cloud Computing Student Scholarship, 2019
- Programming Languages Design and Implementations Travel Grant, 2019
- Programming Languages Mentoring Workshop at POPL Travel Grant, 2019
- Oregon Programming Languages Summer School Travel Grant, 2018
- UC Santa Cruz Regents Fellowship, Winter 2018
- All India Council for Technical Education Scholarship, 2013-2015
- All India Higher Secondary Education Council Scholarship, 2010-2013

Service and Outreach

- Vice President of Women in Cyber-security (WiCyS) students chapter, UC Santa Cruz
- Member of Women in Science and Engineering (WiSE), UC Santa Cruz
- External reviewer for Sigmod'23, Sub reviewer for FCS'22
- Student volunteer for CSF'22, PLDI'19, CSF'19, PLDI'22

References

1. [Professor. Owen Arden](#) E-mail: oarden@ucsc.edu
2. [Professor. Ioannis Demertzis](#) E-mail: idemertz@ucsc.edu