TAPTI PALIT

CRA Computing Innovation Fellow, Purdue University

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EDUCATION

- **Postdoctoral Researcher (CRA Computing Innovation Fellow)** Oct 2021 - current
  Department of Computer Science, Purdue University, West Lafayette, IN
  Advisor: Dr. Pedro Fonseca

- **PhD in Computer Science** Aug 2015 - Oct 2021
  Stony Brook University, Stony Brook NY
  Thesis: Selective Data Encryption: A Scalable Defense against Sensitive Data Leakage
  Advisor: Dr. Michalis Polychronakis

- **Masters in Computer Science** Aug 2013 - Aug 2015
  Stony Brook University, Stony Brook NY
  Thesis: Benchmarking Network-Intensive Applications
  Advisor: Dr. Mike Ferdman

PROFESSIONAL EXPERIENCE

- Research Assistant Jan 2017 - Oct 2021
  Stony Brook University
  Supervisor: Dr. Michalis Polychronakis

- Research Engineer Intern May 2018 - Aug 2018
  Zeropoint Dynamics
  Supervisor: Dr. Kevin Snow

PUBLICATIONS

- **Tapti Palit**, Pedro Fonseca. "Kaleidoscope: Precise Invariant-Guided Pointer Analysis" *(Under Major Revision)*. In the ACM International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS), 2024.

- Dinglan Peng, Congyu Liu, **Tapti Palit**, Pedro Fonseca, Anjo Vahldiek-Oberwagner, Mona Vij. "µSWITCH: Fast Kernel Context Isolation with Implicit Context Switches". In the IEEE Symposium on Security and Privacy (S&P), 2023.

- Seyedhamed Ghavamnia, **Tapti Palit**, and Michalis Polychronakis. "C2C: Fine-grained Configuration-driven System Call Filtering". In the Proceedings of the ACM SIGSAC Conference on Computer and Communications Security (CCS), 2022.

- **Tapti Palit**, Jarin Firose Moon, Fabian Monrose, and Michalis Polychronakis. "DynPTA: Combining Static and Dynamic Analysis for Practical Selective Data Protection" in the IEEE Symposium on Security and Privacy (S&P), 2021.

- **Tapti Palit**, Fabian Monrose, and Michalis Polychronakis. "Mitigating Data-only Attacks by Protecting Memory-resident Sensitive Data." In ACM Digital Threats: Research and Practice (DTRAP), 2020. *(Extended Version)*

- Seyedhamed Ghavamnia, **Tapti Palit**, Shachee Mishra, and Michalis Polychronakis. "Temporal System Call Specialization for Attack Surface Reduction." In the 29th USENIX Security Symposium (USENIX Security), 2020.

- Seyedhamed Ghavamnia, **Tapti Palit**, Azzedine Benameur, and Michalis Polychronakis. "Confine: Automated System Call Policy Generation for Container Attack Surface Reduction." In the Proceedings of the International Conference on Research in Attacks, Intrusions, and Defenses (RAID), 2020.

- **Tapti Palit**, Fabian Monrose, and Michalis Polychronakis. "Mitigating Data Leakage by Protecting Memory-resident Sensitive Data." In Proceedings of the 35th Annual Computer Security Applications Conference (AC-SAC), 2019.

- Shenghsun Cho, Amoghavarsha Suresh, **Tapti Palit**, Michael Ferdman, and Nima Honarmand. "Taming the Killer Microsecond." In the 51st Annual IEEE/ACM International Symposium on Microarchitecture (MICRO), 2018.

- **Tapti Palit**, Yongming Shen, and Michael Ferdman. "Demystifying Cloud Benchmarking." In the IEEE international symposium on performance analysis of systems and software (ISPASS), 2016.

- Varun Agrawal, Abhiroop Dabral, **Tapti Palit**, Yongming Shen, and Michael Ferdman. "Architectural Support for Dynamic Linking." In Proceedings of the Twentieth International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS), 2015.

PROFESSIONAL SERVICE

- Program Committee Member for ASPLOS 2024
- Program Committee Member for ISC 2023
- Program Committee Member for DIMVA 2023, 2022
- Reviewer for ACM Journal: Transactions on Privacy and Security (TOPS), 2020
- External reviewer for CCS 2020, DIMVA 2020

TEACHING EXPERIENCE

- Guest Lecturer *(2 lectures)*
  - CS 408 *(Software Testing)*, Purdue University, Spring 2023
- Teaching Assistant
  - CSE 502 *(Computer Architecture)*, Stony Brook University, Spring 2016
  - CSE 391 *(Cloud Computing)*, Stony Brook University, Fall 2015
  - CSE 506 *(Operating Systems)*, Stony Brook University, Fall 2015

AWARDS

- CRA Computing Innovation Fellowship, Oct 2021
- IEEE S&P Student Travel Award, Apr 2018
- Stony Brook University CS Department Chair Fellowship, Aug 2015

DIVERSITY AND INCLUSION WORK

- SBU CS Department Diversity Committee Member, Jan-Oct 2021
- Web Admin and E-board Member of Women in PhD graduate club, Feb 2017 - Oct 2021
- Instructor at SBU WISE's STEM mentorship program for female high school students, Aug 2018 - May 2020