

Ashrujit Ghoshal

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EDUCATION

University of Washington,

Ph.D. in Computer Science

Advisors: Stefano Tessaro, Rachel Lin

Jan 2019 – Present

University of California, Santa Barbara,

Ph.D. in Computer Science

Advisors: Stefano Tessaro, Rachel Lin

Sep 2018 – Dec 2018

Indian Institute of Technology, Kharagpur,

Bachelor of Technology in Computer Science and Engineering

Thesis: Implementation Attacks on Block Ciphers: New Approaches and Countermeasures

Advisor: Debdeep Mukhopadhyay

Jul 2014 – Jul 2018

PUBLICATIONS

Ashrujit Ghoshal, Stefano Tessaro. On the Memory Tightness of Hashed ElGamal. Eurocrypt 2020.

Ashrujit Ghoshal, Rajat Sadhukhan, Sikhar Patranabis, Nilanjan Datta, Stjepan Picek, Debdeep Mukhopadhyay (2018). Lightweight and Side-channel Secure 4×4 S-Boxes from Cellular Automata Rules. IACR Transactions on Symmetric Cryptology, 2018(3), 311-334.

Ashrujit Ghoshal, Sikhar Patranabis, Debdeep Mukhopadhyay (2018) Template-Based Fault Injection Analysis of Block Ciphers. In: Chattopadhyay A., Rebeiro C., Yarom Y. (eds) Security, Privacy, and Applied Cryptography Engineering. SPACE 2018. Lecture Notes in Computer Science, vol 11348. Springer, Cham

Ashrujit Ghoshal, Thomas De Cnudde (2017) Several Masked Implementations of the Boyar-Peralta AES S-Box. In: Patra A., Smart N. (eds) Progress in Cryptology – INDOCRYPT 2017. INDOCRYPT 2017. Lecture Notes in Computer Science, vol 10698. Springer, Cham

Rajat Sadhukhan, Sikhar Patranabis, Ashrujit Ghoshal, Vishal Saraswat, Debdeep Mukhopadhyay, Santosh Ghosh. Journal of Hardware and Systems Security (2017) 1: 203.

TEACHING ASSISTANTSHIPS

CSE526: Cryptography, University of Washington

April-Jun 2019

LONG TERM VISITS

Simons Institute for the Theory of Computing, UC Berkeley.

Visiting Graduate Student in the program *Lattices: Algorithms, Complexity, and Cryptography*.

Feb 2020 – Mar 2020

Computer Security and Industrial Cryptography group, KU Leuven, Belgium.

Visiting Scholar. Hosted by: Vincent Rijmen.

May 2017 – Jul 2017

Indian Statistical Institute, Kolkata.

Visiting Student. Hosted by: Mridul Nandi.

May 2016 – Jul 2016

AWARDS & RECOGNITIONS

Regents Fellowship, University of California Santa Barbara.

2018

Best Project Award, Department of CSE, IIT Kharagpur

2018

Awarded for best B.Tech project and thesis among all undergraduate students.

Meduri Bhanumurthy Memorial Award, IIT Kharagpur

2018

Awarded for being adjudged to be the best in extra-curricular activities in the graduating batch.

Gora Lal Syngal Memorial Scholarship, IIT Kharagpur

2015,2016,2017

Awarded for academic excellence.

Kirrtan B Behera Memorial Award, IIT Kharagpur

2016

Awarded for being the best all-rounder in the year.

OTHER DETAILS

Nationality: Indian