

Marilyn George

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EDUCATION

BROWN UNIVERSITY

PHD IN COMPUTER SCIENCE

Aug 2017-present | Providence, RI

MS IN COMPUTER SCIENCE

2017-2019 | Providence, RI

INDIAN INST. OF SCIENCE

MENG IN COMPUTER SCIENCE

2014-2016 | Bangalore, IN

NATIONAL INST. OF TECH.

BTECH IN COMPUTER SCIENCE

2009-2013 | Calicut, IN

SKILLS

PROGRAMMING

Proficient:

Python • Java • \LaTeX

Familiar:

C • C++ • Shell • MySQL • Matlab

AWARDS

Rising Stars EECS (2020)

TALKS

Surveillance, Privacy & Social Control,
DIMACS Workshop on Law & CS 2020

SERVICE

Reviewer for Eurocrypt '20, Crypto '21 •
CS PhD Mentorship 2019-2021 •
President, Indian Community at Brown,
2018-2019

COURSEWORK

Cryptography

Secure Computation

Privacy-Conscious Computer Systems

Software Security & Exploitation

Automata Theory & Computability

Design & Analysis of Algorithms

Approximation Algorithms

Topics in Algorithmic Game Theory

Machine Learning & AI

Program Analysis & Verification

INTERESTS

Reading • Word Games • Math & Logic
Puzzles

RESEARCH (SELECTED)

STRUCTURED ENCRYPTION & DYNAMIC LEAKAGE SUPPRESSION | EUROCRYPT 2021

With S. Kamara and T. Moataz. Designed dynamic structured encryption with query equality suppression using oblivious RAM techniques.

ADVERSARIAL LEVEL AGREEMENTS FOR SECURE COMPUTATION | MANUSCRIPT

Modified traditional cryptographic protocols for greater efficiency using penalties for adversarial deviations using game theoretic techniques.

SURVEILLANCE AND PRIVACY | MANUSCRIPT

Studied the privacy costs of government surveillance in social networks.

INVESTIGATING COMPETITIVE EQUILIBRIA | ONGOING

Analyzing expressive prices to obtain Walrasian Equilibria in single-minded markets.

GDPR COMPLIANT LEGACY DATABASES | ONGOING

Designing a GDPR compliance tool for legacy databases using query workloads.

EXPERIENCE

BROWN COMPUTER SCIENCE | GRADUATE STUDENT

Aug 2017-present | Providence, RI

- Research in applied cryptography with Prof. Seny Kamara,
- Research in algorithmic game theory with Prof. Amy Greenwald, and privacy-conscious systems with Prof. Malte Schwarzkopf.

UTU TECHNOLOGIES | INTERN

Summer 2020 | Remote

- Studied cryptographic methods to implement data provision from customers with Dr. Bastian Blankenberg.

MICROSOFT RESEARCH INDIA | RESEARCH FELLOW

2016 – 2017 | Bangalore, IN

- Developed efficient methods to support analytics on encrypted data with Dr. Nishanth Chandran and Dr. Satya Lokam.

CRYPTOGRAPHY, SECURITY AND PRIVACY GROUP | STUDENT

2015 – 2016 | Bangalore, IN

- Studied searchable encryption with Prof. Bhavana Kanukurthi.

GOLDMAN SACHS INDIA | PROGRAMMER ANALYST

2013 – 2014 | Bangalore, IN

- Developed and maintained internal compliance systems.

TEACHING

2021 Course Design Certificate
2021 Teaching Consultant Program
2020 Topics in Algorithmic Game Theory
2020 Reflective Teaching Certificate
2019 An Introduction to Cryptography
2018 An Introduction to Cryptography

Sheridan Center for Teaching & Learning
Sheridan Center for Teaching & Learning
Graduate Teaching Assistant, Brown CS
Sheridan Center for Teaching & Learning
Instructor, Summer@Brown
Co-instructor, Summer@Brown