

Marilyn George

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Data Science Initiative, 3rd Floor

164 Angell Street
Providence, RI 02912

EDUCATION

Brown University

Ph.D. in Computer Science

M.S. in Computer Science

Providence, Rhode Island

Aug 2017 – May 2022

Aug 2017 – May 2019

Indian Institute of Science

M.E. in Computer Science

Bangalore, Karnataka

Aug 2014 – May 2016

National Institute of Technology

B.Tech. in Computer Science and Engineering

Calicut, Kerala

Aug 2009 – May 2013

EXPERIENCE

Brown University

Graduate Research Assistant

- Researching structured encryption with a focus on leakage suppression and practical efficiency with Prof. Seny Kamara
- Researching privacy-conscious system design with Prof. Malte Schwarzkopf, and pricing equilibria in single-minded markets with Prof. Amy Greenwald

Providence, Rhode Island

Aug 2017 – May 2022

MongoDB

Research Intern

- Designed new methods of practically efficient leakage suppression to hide query volumes

New York City, New York

Jul 2021 – Sep 2021

UTU Technologies

Research Intern

- Analyzed cryptographic methods for customer data provision on the blockchain

Remote

May 2020 – Aug 2020

Microsoft Research India

Research Fellow

- Developed efficient methods to support analytics on encrypted data using partially homomorphic encryption

Bangalore, Karnataka

Jun 2016 – Jul 2017

Indian Institute of Science

Graduate Research Assistant

- Studied searchable encryption and designed search pattern hiding techniques with Prof. Bhavana Kanukurthi

Bangalore, Karnataka

Aug 2015 – May 2016

Goldman Sachs India

Programmer Analyst

- Developed and maintained internal trade compliance systems

Bangalore, Karnataka

May 2013 – Aug 2014

RESEARCH

On the Cost of Suppressing Volume for Encrypted Multi-maps

Megumi Ando and Marilyn George

Proceedings of the 22nd Privacy Enhancing Technologies Symposium (2022)

PETS 2022

Adversarial Level Agreements for Two-Party Computation

Marilyn George and Seny Kamara

Proceedings of the ACM Asia Conference on Computer and Communications Security (2022)

AsiaCCS 2022

GDPR Compliant Legacy Databases

Archita Agarwal, Marilyn George, Aaron Jeyaraj, and Malte Schwarzkopf

Proceedings of the VLDB Endowment, Volume 15 (2021-2022)

VLDB 2022

Structured Encryption and Dynamic Leakage Suppression

Marilyn George, Seny Kamara, and Tarik Moataz

Annual International Conference on the Theory and Applications of Cryptographic Techniques (2021)

EUROCRYPT 2021

Towards Untrusted Social Video Verification to Combat Deepfakes	Workshop, CVPR 2020
Eleanor Tursman, <i>Marilyn George</i> , Seny Kamara, and James Tompkin	
Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (2020)	
Synq: An Encrypted Database for Public Policy Studies	Manuscript
Zachary Espiritu, <i>Marilyn George</i> , Seny Kamara, and Lucy Qin	
Surveillance, Privacy, and Social Control	Manuscript
Grace Boghosian, <i>Marilyn George</i> , and Seny Kamara	
Structured Encryption and Efficient Query Equality Suppression	Ongoing
<i>Marilyn George</i> , Seny Kamara, and Tarik Moataz	
Investigating Competitive Equilibria	Ongoing
Enrique Areyan Viqueira, <i>Marilyn George</i> , and Amy Greenwald	

TALKS

Adversarial Level Agreements for Two-Party Protocols	AsiaCCS 2022	2022
Structured Encryption and Dynamic Leakage Suppression	Indian Institute of Science	2022
Structured Encryption and Dynamic Leakage Suppression	Duke University	2022
Structured Encryption and Dynamic Leakage Suppression	University of Massachusetts, Dartmouth	2022
Structured Encryption and Dynamic Leakage Suppression	Monash University	2021
Structured Encryption and Dynamic Leakage Suppression	Google Research	2021
Structured Encryption and Dynamic Leakage Suppression	Boston University	2021
Structured Encryption and Dynamic Leakage Suppression	EUROCRYPT 2021	2021
Structured Encryption and Dynamic Leakage Suppression	University of Chicago	2021
Surveillance, Privacy, and Social Control	DIMACS Workshop on Law and CS	2020

TEACHING

Course Design Certificate	Sheridan Center for Teaching and Learning	2021
Teaching Consultant Program	Sheridan Center for Teaching and Learning	2021
Graduate Teaching Assistant, Brown CS	Algorithmic Game Theory	2020
Reflective Teaching Certificate	Sheridan Center for Teaching and Learning	2020
Instructor, Summer@Brown	An Introduction to Cryptography	2019
Co-instructor, Summer@Brown	An Introduction to Cryptography	2018

HONORS AND AWARDS

Coline M. Makepeace Fellowship	2021-2022
Kanellakis Fellowship	2021-2022
Rising Stars EECS	2020

SERVICE

Reviewer	EUROCRYPT 2022, CRYPTO 2021	2021
Reviewer	EUROCRYPT 2021	2020
Ph.D. Mentorship Czar	Brown CS	2019-2022
President	Indian Community at Brown	2018-2019

PROGRAMMING

C, C++, Java, \LaTeX , MATLAB, Python, Shell, and MySQL

OTHER INTERESTS

Reading, Word Games, Math and Logic Puzzles