

Marilyn George

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EDUCATION

Brown University <i>Ph.D. in Computer Science</i> <i>M.S. in Computer Science</i>	Providence, Rhode Island Aug 2017 – May 2022 Aug 2017 – May 2019
Indian Institute of Science <i>M.E. in Computer Science</i>	Bangalore, Karnataka Aug 2014 – May 2016
National Institute of Technology <i>B.Tech. in Computer Science and Engineering</i>	Calicut, Kerala Aug 2009 – May 2013

EXPERIENCE

MongoDB Research <i>Research Scientist</i> <ul style="list-style-type: none">• Researching practical methods for leakage suppression.• Analyzing the system-level security of Queryable Encryption.	New York City, New York Aug 2022 –
Brown University <i>Graduate Research Assistant</i> <ul style="list-style-type: none">• Designed structured encryption schemes with a focus on dynamic and practically efficient leakage suppression with Prof. Seny Kamara• Designed GDPR compliance mechanisms for legacy databases with Prof. Malte Schwarzkopf, and studied pricing equilibria in single-minded markets with Prof. Amy Greenwald	Providence, Rhode Island Aug 2017 – May 2022
MongoDB <i>Research Intern</i> <ul style="list-style-type: none">• Designed new methods of practically efficient leakage suppression to hide query volumes	New York City, New York Jul 2021 – Sep 2021
UTU Technologies <i>Research Intern</i> <ul style="list-style-type: none">• Analyzed cryptographic methods for customer data provision on the blockchain	Remote May 2020 – Aug 2020
Microsoft Research India <i>Research Fellow</i> <ul style="list-style-type: none">• Developed efficient methods to support analytics on encrypted data using partially homomorphic encryption	Bangalore, Karnataka Jun 2016 – Jul 2017
Indian Institute of Science <i>Graduate Research Assistant</i> <ul style="list-style-type: none">• Studied searchable encryption and designed search pattern hiding techniques with Prof. Bhavana Kanukurthi	Bangalore, Karnataka Aug 2015 – May 2016
Goldman Sachs India <i>Programmer Analyst</i> <ul style="list-style-type: none">• Developed and maintained internal trade compliance systems	Bangalore, Karnataka May 2013 – Aug 2014

RESEARCH

Synq: Public Policy Analytics over Encrypted Data Zachary Espiritu, Marilyn George, Seny Kamara, and Lucy Qin IEEE Symposium on Security and Privacy (2024)	IEEE S&P 2024
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	AsiaCCS 2022

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

GDPR Compliant Legacy Databases VLDB 2022
Archita Agarwal, *Marilyn George*, Aaron Jeyaraj, and Malte Schwarzkopf
Proceedings of the VLDB Endowment, Volume 15 (2021-2022)

Structured Encryption and Dynamic Leakage Suppression EUROCRYPT 2021
Marilyn George, Seny Kamara, and Tarik Moataz
Annual International Conference on the Theory and Applications of Cryptographic Techniques (2021)

Towards Untrusted Social Video Verification to Combat Deepfakes Workshop, CVPR 2020
Eleanor Tursman, *Marilyn George*, Seny Kamara, and James Tompkin
Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (2020)

Surveillance, Privacy, and Social Control Manuscript
Grace Boghosian, *Marilyn George*, and Seny Kamara

Structured Encryption and Efficient Query Equality Suppression Manuscript
Marilyn George, Seny Kamara, and Tarik Moataz

Investigating Competitive Equilibria Ongoing
Enrique Areyan Viqueira, *Marilyn George*, and Amy Greenwald

TALKS

On the Cost of Suppressing Volume for Encrypted Multi-maps – PETS 2022 2022
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

Program Committee – CT-RSA 2024 2023
Invited Speaker – RISE Workshop at CRYPTO 2023 2023
External Reviewer – CCS 2023, CRYPTO 2023 2023
External Reviewer – CRYPTO 2021, EUROCRYPT 2022 2021

External Reviewer – EUROCRYPT 2021

2020

Ph.D. Mentorship Czar – Brown Computer Science

2019-2022

President – Indian Community at Brown University

2018-2019

PROGRAMMING

C, C++, Java, L^AT_EX, MATLAB, Python, Shell, and MySQL

OTHER INTERESTS

Reading, Word Games, Math and Logic Puzzles