

Professional Experience

Postdoctoral Research Associate <i>Data Science Institute, Brown University, Providence, Rhode Island</i> Host: Anna Lysyanskaya	August 2023 – Present
Quantum Computing Summer Associate <i>Future Lab for Applied Research and Engineering, JPMorgan Chase, NYC, New York</i>	Summer 2022
Research Intern <i>Visa Research, Palo Alto, California</i>	Summer 2019
Intern in Summer Program in Applied MPC and Implementations <i>Bar-Ilan University, Ramat Gan, Israel</i>	Summer 2018

Education

Ph.D. in Computer Science <i>Northeastern University, Boston, MA</i> Advisor: abhi shelat Thesis: <i>Securely Computing Threshold Variants of Signature Schemes (and More!)</i>	Spring 2023
B.S. in Computer Science B.S. in Mechanical Engineering <i>The University of Texas at Austin, Austin, TX</i>	Spring 2017

Publications

Note: Unless otherwise noted, authors ordered alphabetically, as is convention in cryptography.

Manuscripts

- J. Doerner, Y. Kondi, **E. Lee**, and a. shelat. "Threshold ECDSA in Three Rounds".
<https://eprint.iacr.org/2023/765>

Journals

- J1. M. Chen, R. Cohen, J. Doerner, Y. Kondi **E. Lee**, S. Rosefield, and a. shelat. "Multiparty Generation of an RSA Modulus", in Journal of Cryptology. Vol. 35(2).

Conference Proceedings

6. J. Doerner, Y. Kondi, **E. Lee**, a. shelat, and L. Tyner. "Threshold BBS+ Signatures for Distributed Anonymous Credential Issuance", in IEEE Security and Privacy (Oakland) 2023.
5. A. Dalskov, **E. Lee**, and E. Soria-Vazquez. "Circuit Amortization Friendly Encodings and their Application to Statistically Secure Multiparty Computation", in Asiacrypt 2020.
4. M. Chen, R. Cohen, J. Doerner, Y. Kondi **E. Lee**, S. Rosefield, and a. shelat. "Multiparty Generation of an RSA Modulus", in CRYPTO 2020.
3. J. Doerner, Y. Kondi, **E. Lee**, and a. shelat. "Threshold ECDSA from ECDSA Assumptions: The Multiparty Case", in IEEE Security and Privacy (Oakland) 2019.
2. J. Doerner, Y. Kondi, **E. Lee**, and a. shelat. "Secure Two-Party Threshold ECDSA from ECDSA Assumptions", in IEEE Security and Privacy (Oakland) 2018.
1. C. Freitag, R. Goyal, S. Hohenberger, V. Koppula, **E. Lee**, T. Okamoto, J. Tran, and B. Waters. "Signature Schemes with Randomized Verification," in ACNS, 2017.

Talks

Threshold BBS+ Signatures for Distributed Anonymous Credential Issuance

- SPRING Group Meeting at EPFL (Jan 2023)
- Northeastern University Theory Seminar (Nov 2022)
- Brown University Crypto Reading Group (Nov 2022)
- JP Morgan Crypto Group Meeting (Aug 2022)

Circuit Amortization Friendly Encodings and their Application to Statistically Secure Multiparty Computation

- Asiacrypt 2020 (pre-recorded conference talk)

Secure Two-Party Threshold ECDSA from ECDSA Assumptions

- IEEE S&P 2018 (conference talk)
- Theory and Practice of Multiparty Computation 2018 (workshop talk)

Activities

Teaching Assistantships at Northeastern University:

- CS 4700/5700: Network Fundamentals (instructor David Choffnes, Fall 2022)
- CY 4770: Cryptography (instructor Ran Cohen, Spring 2021)
- CY 4770: Cryptography (instructor Daniel Wicks, Spring 2020)

External Reviewer: ACM CCS (2023), Eurocrypt (2023, 2020, 2019), CRYPTO (2021, 2019, 2018), IEEE S&P (2020), TCC (2020, 2019), CANS (2020), AFT (2020, 2019)

Extracurriculars at Northeastern University:

- Organizer for NEU Crypto Reading Group (Spring 2019, Fall 2019, Spring 2020)
- One of three PhD student liaisons on the design committee for the new lab for NEU's Cybersecurity and Privacy Institute (Fall 2022—Spring 2023)

Women in STEM Outreach:

- Instructor for *Girls Who Code*'s "Summer Immersion Program", an 8-week outreach program teaching computer science to rising junior and senior high school women (Summer 2017)
- Designed and conducted a hands-on activity building and racing mini cardboard boats for UT Austin's annual "Introduce a Girl to Engineering Day" (Spring 2017)