MAX TROMANHAUSER

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EDUCATION

Cornell University — Ithaca, NY
Doctor of Philosophy, Computer Science — 2024 – Present
Advised by Nicholas Spooner

Brown University — Providence, RI
Master of Science, Computer Science — 2022 – 2024
Advised by Peihan Miao

University of Pennsylvania — Philadelphia, PA
Bachelor of Science in Engineering, Computer Science — 2012 – 2016

ACADEMIC PUBLICATIONS

On Removing Interaction from Quantum Proofs — 2026
Nicholas Spooner and Max Tromanhauser
QCrypt 2026.

How to Define Expected Quantum Polynomial-Time Zero Knowledge Simulation
Santiago Li, Nicholas Spooner, and Max Tromanhauser.
TCC 2026, QIP 2026 (Poster).

Pseudorandom Correlation Generators for Multiparty Beaver Triples over $\mathbb{F}_2$ — 2025
Peihan Miao, Alice Murphy, Akshayaram Srinivasan, and Max Tromanhauser.
Asiacrypt 2025.

Finding Balance in Unbalanced PSI: A New Construction from Single-Server PIR
Chengyu Lin, Zeyu Liu, Peihan Miao, and Max Tromanhauser.
IACR Communications in Cryptography 2025, Volume 2, Issue 1.

Updatable Private Set Intersection Revisited: — 2024
Extended Functionalities, Deletion, and Worst-Case Complexity
Saikrishna Badrinarayanan, Peihan Miao, Xinyi Shi, Max Tromanhauser, and Ruida Zeng.
Asiacrypt 2024.

TEACHING EXPERIENCE

Cornell University — Ithaca, NY
Teaching Assistant, *Introduction to Computational Complexity* — 2026
Teaching Assistant, *Quantum Cryptography* — 2025

Brown University — Providence, RI
Teaching Assistant, *Data Engineering* — 2022

University of Pennsylvania — Philadelphia, PA
Head Teaching Assistant, *Introduction to Computer Programming* — 2015 – 2016
Teaching Assistant, *Introduction to Computer Programming* — 2013 – 2014
Teaching Assistant, *JavaScript* — 2015

INDUSTRY EXPERIENCE

Flatiron Health — New York, NY
Senior Software Engineer, *Clinical Research* — 2020 – 2022
Software Engineer, *Real World Evidence* — 2017 – 2019

Microsoft — Redmond, WA
Software Engineer, *Azure Active Directory* — 2016 – 2017

INDUSTRY PUBLICATIONS

P10.14 ctDNA and Real-World Response (rwR) in Patients With Lung Cancer From A Prospective Real-World Clinico-Genomic (PCG) Study 2021
A. Vanderwalde, M. Lu, S. Maund, M. Huntley, D. Incerti, A. Fine, K. Tolba, D. Jin, A. Bourla, A. Sondhi, M. Tromanhauser, D. Daniel, J. Tilford, J. McFarlane, S. Lakhanpal, G. Oxnard, and K. Schulze.
World Conference on Lung Cancer 2021, Virtual (Poster).

Approximating International Myeloma Working Group Uniform Response Criteria to Derive Response for Multiple Myeloma (MM) Patients Using Data from Electronic Health Records (EHR) 2019
R. Foster, M. Tromanhauser, C. Gayer, P. Gonzales, K. Maignan, A. Opong, A. Torres, and K. Carson.
American Society for Hematology Annual Meeting and Exposition 2019 (Poster).

PATENTS

Systems and methods for managing clinical trials (No. US11742061B2) 2023
A. Padmos, A. Leung, J. Buddle, L. Sutton, M. Tromanhauser, S. Lee, and A. Hogan.

HONORS AND AWARDS

Hartmanis Fellowship 2024 – 2025
Full tuition and stipend for one academic year.

CIS Senior Design Second Prize Award 2016

SERVICE

Conference Reviewer. TCC 2023, Eurocrypt 2025, Crypto 2025, TCC 2025, STOC 2026, TQC 2026, TCC 2026.