

# Ariel Szekely

## Contact Information

Phone +1 (817) 876-2431  
Email arielck@mit.edu  
Homepage www.arielck.com

## Education

- 2020-present **Ph.D. in Computer Science**, *Massachusetts Institute of Technology*, Cambridge, MA  
2020-2022 **M.S. in Computer Science**, *Massachusetts Institute of Technology*, Cambridge, MA,  
Thesis:  *$\sigma$ OS: Elastic Realms for Multi-Tenant Cloud Computing*  
GPA: 5.0/5.0  
2016-2020 **B.S. in Computer Science (Honors)**, *The University of Texas at Austin*, Austin, TX,  
Thesis: *Exploring GPU Timing Side-Channels*  
GPA: 3.94/4.0

## Interests

Distributed Systems, Operating Systems, Security, Concurrency.

## Publications

- [1] **Ariel Szekely**, Adam Belay, Robert Morris, and M. Frans Kaashoek. Unifying serverless and microservice workloads with sigmaos. In Proceedings of the ACM SIGOPS 30th Symposium on Operating Systems Principles, SOSP '24, page 385–402, New York, NY, USA, 2024. Association for Computing Machinery.
- [2] Henrique Fingler, Isha Tarte, Hangchen Yu, **Ariel Szekely**, Bodun Hu, Aditya Akella, and Christopher J. Rossbach. Towards a machine learning-assisted kernel with lake. In 18th Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS 23), Vancouver, Canada, March 2023. Association for Computing Machinery.
- [3] Tyler Hunt, Zhipeng Jia, Vance Miller, **Ariel Szekely**, Yige Hu, Christopher J. Rossbach, and Emmett Witchel. Telekine: Secure computing with cloud gpus. In 17th USENIX Symposium on Networked Systems Design and Implementation (NSDI 20), Santa Clara, CA, February 2020. USENIX Association.

## Awards

- 2022 NSF Graduate Research Fellowship  
2020 MIT Lemelson Presidential Fellowship  
2020 MIT EECS Departmental Fellowship  
2020 Dean's Honored Graduate, UT Austin College of Natural Sciences  
2020 Research Distinction, UT Austin College of Natural Sciences  
2020 NSF Graduate Research Fellowship Honorable Mention  
2020 CRA Outstanding Undergraduate Researcher Honorable Mention  
2019 NSF REU  
2019 UT Endowed Presidential Scholarship

- 2018,19,20 UT College of Natural Sciences College Scholar
- 2018 Louis E. Rosier Memorial Scholarship
- 2016 UT CNS Freshman Scholarship
- 2016 National Merit Scholarship

## Professional Experience

- 2023 **Student Researcher**, *Google Systems Research Group*, Seattle, WA
- 2019 **Research Assistant**, *The University of Texas at Austin*, Austin, TX
- 2018 **Software Engineer Intern**, *Bloomberg L.P.*, New York City, NY
- 2017 **Software Engineer Intern**, *AT&T*, Dallas, TX

## Teaching Experience

- 2023 **TA: Computer Systems Security**, *Massachusetts Institute of Technology*  
Instructors: Nickolai Zeldovich
- 2022 **TA: Operating Systems Engineering**, *Massachusetts Institute of Technology*  
Instructors: Frans Kaashoek, Robert Morris
- 2020 **TA: Concurrency (Honors)**, *The University of Texas at Austin*  
Instructor: Christopher J. Rossbach
- 2020 **TA: Intro to CS Research (Honors)**, *The University of Texas at Austin*  
Instructor: Calvin Lin
- 2019 **TA: Intro to CS Research (Honors)**, *The University of Texas at Austin*  
Instructor: Calvin Lin

## Service

- 2022-present **EECS Communication Lab Fellow**, *Massachusetts Institute of Technology*, Cambridge, MA
- 2021 **SOSP '21 Artifact Evaluation Committee**, *SOSP 2021*, Kolbenz, Germany
- 2020-present **MIT Graduate Application Assistance Program Mentor**, *Massachusetts Institute of Technology*, Cambridge, MA
- 2020 **MIT AI Undergraduate Mentorship Program Mentor**, *Massachusetts Institute of Technology*, Cambridge, MA
- 2017-2020 **UTCS Ambassador**, *The University of Texas at Austin*, Austin, TX

## Languages

- English Fluent
- Spanish Fluent
- French Intermediate