

James Larisch

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Education

- 2017–Present **PhD in Computer Science**, *Harvard University*, Cambridge, MA
Advisor: Eddie Kohler
- 2017–2020 **MS in Computer Science**, *Harvard University*, Cambridge, MA
Advisor: James Mickens
- 2012–2017 **BS in Computer Science**, *Northeastern University*, Boston, MA
Magna Cum Laude

Honors & Awards

- 2019 **NSF Graduate Research Fellowship**, *National Science Foundation*
- 2017 **Chen Graduate Student Research Fellowship**, *Harvard University*
- 2017 **IEEE Cybersecurity Award for Innovation (CRLite)**, *IEEE SecDev & MITRE*
- 2017 **Undergraduate Research Award**, *Northeastern University, CCIS*
- 2012 **Fellows Scholarship**, *Northeastern University, CCIS*
- 2012 **Excellence Scholarship**, *Northeastern University*

Current Research

My research focuses on improving the flexibility and performance of modern Web infrastructure and applications while providing strong security and privacy guarantees. I'm interested in building novel systems that increase the privacy of Web infrastructure, offer users more control over their data, and foster trust in an increasingly untrustworthy internet.

- Submitted Larisch, James & Aqeel, Waqar, Zachary Hanif, Michael Lum, Olamide Omolola, Yaelle Goldschlag, Taejoong Chung, Dave Levin, Bruce Maggs, Alan Mislove, Bryan Parno, and Christo Wilson. “**Making the PKI More Evolvable with Assertion-Carrying Certificates.**” (Oakland 2021)
- In Progress Larisch, James, Alisha Ukani, Gabriele Oliaro, Savvy Raghuvanshi, Vincent Viego, Eddie Kohler, and James Mickens. “**Juice: Concentrated Application State for Stateful Serverless Platforms.**”
- In Progress Larisch, James, Eddie Kohler, and James Mickens. “**Catalyst: Towards Safe Datagram Transport in Web Applications.**”

Refereed Publications

- 2020 Aqeel, Waqar, Zachary Hanif, James Larisch, Olamide Omolola, Taejoong Chung, Dave Levin, Bruce Maggs, Alan Mislove, Bryan Parno, and Christo Wilson. “**Assertion-Carrying Certificates.**” In 2020 Workshop on Foundations of Computer Security (FCS'20). 2020.

- 2018 Larisch, James, James Mickens, and Eddie Kohler. “**Alto: Lightweight VMs Using Virtualization-aware Managed Runtimes.**” In Proceedings of the 15th International Conference on Managed Languages & Runtimes, pp. 1–7. 2018.
- 2017 Larisch, James, David Choffnes, Dave Levin, Bruce M. Maggs, Alan Mislove, and Christo Wilson. “**CRLite: A Scalable System for Pushing All TLS Revocations to All Browsers.**” In 2017 IEEE Symposium on Security and Privacy (SP), pp. 539–556. IEEE, 2017.

Teaching & Mentoring

- Fall 2020 **Undergraduate Research Mentor**, *Harvard Women in Computer Science*, Systems Group
- Fall 2018 **Teaching Fellow**, *CS263: Systems Security*, James Mickens

Work Experience

- 2019–2020 **Senior Interview Engineer**, *Karat.io*, Remote
- 2017 **Technical Lead**, *Soli*, Boston, MA
- 2016 **Software Engineering Co-op**, *Sonian*, Waltham, MA
Back-end engineer on the email archiving team. Tech: Clojure and Elasticsearch.
- 2015 **Software Engineering Co-op**, *Gem.co*, Los Angeles, CA
Back-end engineer on the core Bitcoin API team. Tech: Ruby and PostgreSQL.
- 2014 **Software Engineering Co-op**, *HubSpot*, Cambridge, MA
Back-end engineer on the Analytics team. Tech: Java, Apache Hadoop, HBase, and Kafka.
- 2013 **Software Engineer**, *Focused Coaching*, Morganville, NJ
Sole developer of online SAT score aggregation platform. Tech: Ruby-on-Rails.

Technical Skills

- proficient Go, Ruby, Rust, C, Java, JavaScript, Lua
- experienced C++, SQL, Python, Clojure, Haskell, CSS, HTML, Racket, OCaml, Prolog

Research Adoption & Coverage

- 2020 Introducing CRLite: All of the Web PKI’s revocations, compressed. *Mozilla Security Blog*

Community

- 2018 **Technical Advisory Volunteer**, *ACLU Massachusetts*
Demystified privacy and security concerns at community “Crypto Parties”.
- 2018 **Technical Mentor**, *YouthCITIES*
Mentored high school students building healthcare-focused startup prototypes.