Tej Chajed

Work Experience

Summer 2017

Microsoft Research, Cambridge, UK Research Intern

Verifying low-level parsing in F* for TLS.

Summer 2014

Google, Zürich, Switzerland Software Engineering Intern

Combined video advertising campaigns across systems to enable cross-media insights.

Research

Systems verification: I write systems code, formally specify what the code should do, and write machine-checked proofs that the code always follows its specification. My focus lately has been on concurrency and storage systems — proving your data is safe even if you use it with multiple cores and your computer crashes.

Academic Honors

NSF Graduate Research Fellow	2014-2017
Jacobs Presidential Fellowship	2014
Chancellor's Scholar	2010-2014

Activities

Oct. 2015–May 2017

Treasurer for CSAIL Student Committee

Organized activities and plan the budget for social activities intended for computer science grad students.

Verification side projects

I've used Coq in a non-research capacity to formalize and verify aspects of finite types, record updates, Gödel's System T, array subslicing, and regular expressions. tchajed@mit.edu https://chajed.io (217) 840-0140 250 Elm St apt 3 Cambridge, MA 02139

Education

current, from 2014

Ph.D. (expected) in Computer Science **MIT**

2010-2014

B.S. in Electrical Engineering and B.S. in Computer Science, with Highest Honors Minor in Math

University of Illinois at Urbana-Champaign GPA: 3.95/4.0

Selected Publications

- Tej Chajed, Joseph Tassarotti, M. Frans Kaashoek, Nickolai Zeldovich. Verifying concurrent storage systems with Armada. To appear at SOSP 2019.
- Tej Chajed, Joseph Tassarotti, M. Frans Kaashoek, Nickolai Zeldovich. Argosy: Verifying Layered Storage Systems With Recovery Refinement. PLDI 2019.
- Tej Chajed, M. Frans Kaashoek, Butler Lampson, and Nickolai Zeldovich. Verifying concurrent software using movers in CSPEC. OSDI 2018.
- Atalay İleri, Tej Chajed, Adam Chlipala, M. Frans Kaashoek, and Nickolai Zeldovich. Proving confidentiality in a file system using DiskSec. OSDI 2018.
- Haogang Chen, Daniel Ziegler, Tej Chajed, Adam Chlipala, M. Frans Kaashoek, Nickolai Zeldovich. Using Crash Hoare Logic for Certifying the FSCQ File System. SOSP 2015 (Best paper award).