Caleb Stanford

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Education

- **University of Pennsylvania**
  PhD student, computer science
  Fall 2016 – present
  Advisor: Rajeev Alur.
- **Brown University**
  ScB, mathematics and computer science
  Fall 2013 – Spring 2016
- **Brigham Young University**
  Fall 2012 – Spring 2013

Research

- **Data Transducers for Streamable Regular Functions,** R. Alur, K. Mamouras, and C. Stanford. In submission, 2017.
- **Automata-Based Stream Processing,** R. Alur, K. Mamouras, and C. Stanford. ICALP, July 2017.
- Outstanding Presentation Award for "Context-Directed Reversals of Signed Permutations," H. Li, J. Ramsey, M. Scheepers, H. Schilling, and C. Stanford. Joint Math Meetings (JMM), January 2016. Travel grant from JMM awarded.

Teaching

- **Graduate TA** for CIS 500, Software Foundations (Fall 2017)
- **LaTeX workshop teacher** for the Brown Science Center (Spring 2014 – Spring 2016)
- **Undergraduate TA** for CS 51 Models of Computation (Fall 2015)
- **Undergraduate TA** for CS 22 Discrete Structures and Probability (Spring 2016)
- **Student Teacher** for the BYU Math Circle (Fall 2012 – Spring 2013)
- **Math Resource Center Tutor** at Brown (Fall 2014 – Fall 2015)
- **Grader** for Math 127 Functional Analysis (Fall 2014) and Math 101 Real Analysis (Spring 2015)

Educational Experience

- **Marktoberdorf Summer School** — logical methods for safety and security of software systems. August 2–11, 2017. Accepted with travel grant awarded.
- **Lipa Summer School** — topics connected to logic in computer science. July 3–6, 2017, University of Warsaw.
- **NASSLLI** — North American Summer School on Logic, Language, and Information. July 9–16, 2016, Rutgers University. Scholarship awarded.

Graduate Coursework

- Math 571 Logic II (Penn, Spring 2017)
- ESE 676 Coding Theory (Penn, Spring 2017)
- CIS 673 Computer-Aided Verification (Penn, Fall 2016)
- CIS 500 Software Foundations (Penn, Fall 2016)
- CIS 502 Algorithms (Penn, Fall 2016)

Undergraduate Coursework

Computer Science courses:

- CS 195Y Logic for Systems (Brown, Spring 2016)
- CS 195H Computational Topology (Brown, Spring 2015)
- CS 51 Models of Computation (Brown, Fall 2014)
- CS 146 Computational Linguistics (Brown, Spring 2014)
- CS 141 Artificial Intelligence (Brown, Spring 2014)
- CS 33 Introduction to Systems (Brown, Fall 2013)
- CS 235 Data Structures (BYU, Spring 2013)
- CS 142 Introduction to Programing (BYU, Fall 2012)

Math courses:

- Math 123 Graph Theory (Brown, Spring 2016)
- Math 141 Topology (Brown, Fall 2015)
- Applied Math 174 Recent Applications of Probability and Statistics (Brown, Spring 2015)
- Math 251 Graduate Algebra (Brown, Fall 2014)
- Math 222 Graduate Functional Analysis (Brown, Spring 2014)
- Math 221 Graduate Real Analysis (Brown, Fall 2013)
- Math 352 Complex Analysis (BYU, Spring 2013)
- Math 372 Abstract Algebra 2 — Galois Theory (BYU, Spring 2013)
- Math 371 Abstract Algebra 1 — Groups and Rings (BYU, Fall 2012)
- Math 342 Real Analysis 2 (BYU, Spring 2013)
- Math 341 Real Analysis 1 (BYU, Fall 2012)

Other relevant courses:

- Phil 188 Advanced Deductive Logic (Spring 2016)
- GISP 002 Model Theory (Spring 2015)

  A successful group independent study class on Model Theory, which I initiated. 8 other students participated.
- Phil 54 Logic (Fall 2014)

Other Achievements

- Co-founded and currently run and write problems for the **Utah Math Olympiad**. The fifth annual contest was held in March 2017.
- **Putnam math exam:**

Year	Score	National Rank
2012	30	319th place
2013	40	136th place
2014	40	150th place
2015	30	163.5th place

- **Math GRE:** Score 900; 97th percentile.
- **ACM ICPC:** International Collegiate Programming Contest. Qualified for the Northeast North America regional round, fall 2014 and fall 2015. 3rd place at qualifier round and 5th place at regionals in 2015, as a team of 3.

External Links

- My website: `http://cis.upenn.edu/~castan`
- Utah Math Olympiad: `http://utahmath.org`