Caleb Stanford

castan@cis.upenn.edu

Education

▲ **University of Pennsylvania**
PhD Student, Computer Science
Fall 2016 – Present

▲ **Brown University**
ScB, Mathematics and Computer Science
September 2013 – May 2016

Research

▲ **Automata-based Stream Processing,** submitted to ICALP 2017. With Rajeev Alur and Konstantinos Mamouras.

▲ Outstanding Presentation Award for "Context-Directed Reversals of Signed Permutations," at the Joint Math Meetings (JMM). January 2016. Travel grant from JMM awarded.

▲ **Context-Directed Reversals of Signed Permutations,** in preparation. With H. Li, J. Ramsey, M. Scheepers, H. Schilling.

Achievements

▲ Co-founded and currently run and write problems for the **Utah Math Olympiad**. The fifth annual contest will be held in March 2017.

▲ **Putnam math exam:** Scores of 30, 40, 40 and national ranks 319th place, 136th place, 150th place in 2012, 2013, 2014 respectively.

▲ **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.

Teaching

▲ **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)

▲ **Group Tutor** for Math 90 Calculus (Fall 2014)

▲ **Counselor** at the selective national middle school math program, MathPath (Summer 2013 and Summer 2014)

Graduate Coursework

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

Undergraduate Coursework

Computer Science courses:

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

Math courses:

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

Other relevant courses:

- ▲ Phil 54 Logic (Fall 2014)
- ▲ GISP 002 Model Theory (Spring 2015)

  A group independent study class on Model Theory, which I organized (and taught much of). 8 other students joined, and it was very successful. It was sponsored by the math department, but structured as a rigorous math course.
- ▲ Phil 188 Advanced Deductive Logic (Spring 2016)

Brigham Young University GPA: 3.9.

Brown University GPA: No official GPA.