Caleb Stanford

Education

- **In progress:** PhD Computer Science, University of Pennsylvania, September 2016 – present
- ScB Mathematics - Computer Science, Brown University, September 2013 – May 2016
- Brigham Young University, Fall 2012 – Spring 2013 (transferred to Brown)

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.

Research

- NSF-funded REU, "Complexity Across Disciplines" (Boise State University). The subject matter was in mathematical and computer programming work relevant to computational biology.
- Outstanding Presentation Award at the Joint Math Meetings (JMM), January 2015, for "Context-Directed Reversals of Signed Permutations." Travel grant from JMM awarded.
- Paper, in preparation: "Context-Directed Reversals of Signed Permutations." With H. Li, J. Ramsey, M. Scheepers, H. Schilling.

Achievements

- I co-founded and currently run and write problems for the **Utah Math Olympiad**. The fourth annual contest was held in March 2016.
- On the **Putnam math exam**, my scores were 30, 40, and 40 in 2012, 2013, and 2014, respectively, and my national ranks were 319th place, 136th place, and 150th place, respectively.
- With a team of 3 Brown students, I qualified for the **ACM ICPC** (International Collegiate Programming Contest) Northeast North America regional round in fall 2014 and fall 2015. In 2015, we were the third best school at the qualifier round (BOSPRE) behind Harvard and MIT, and got 5th place at regionals.
- **Math GRE Score:** 900. Percent below was 97%.

Teaching

- **LaTeX workshop teacher** for the Brown University Science Center (Spring 2014 – Present)
- **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)