Elias A. Berkowitz

www.eliasberkowitz.com

EDUCATION

• Brown University: Providence, RI

Sep 2015 - May 2019 (expected)

Email: eliberkowitz@gmail.com

Github: github.com/berkowitze

Bachelors of Science in Applied Mathematics

- o **Coursework**: Differential Equations (3), Fluid Mechanics (2), Physics (4), Statistics (2), Dynamical Systems (2), Physical Geology (4 atmosphere, ocean, solid earth, climate), Computer Science (2).
- Grants: Received Brown Maker Grant and Rhode Island Space Grant to develop experimental rocketry (github).

• High School

2011 - May 2015

• Oakwood Friends School: Poughkeepsie, NY.

Sep 2014 - May 2015

o Colegio Objetivo: Campinas, Brazil. Rotary Youth Exchange Student.

Jul 2013 - Jun 2014

• F. D. Roosevelt High School: Hyde Park, NY.

Sep 2011 - Jun 2013

Work Experience

• Head Teaching Assistant

Jun - Dec 2018

<u>CSCI 0111</u> - Computing Foundations: Data, Brown University

- Course development: Developed assignments for new introductory computer science course at Brown.
- Leadership: Co-led team of undergraduate teaching assistants.
- Software: Developed software to anonymously grade student work quickly while easily giving detailed feedback.
- **Feedback**: Personal evaluations written by students available upon request. Scored 1.21 with 1 being the highest score and 5 being the lowest. Course received a 1.48.

• Teaching Assistant

2017 - 2019

Brown University Computer Science Department

• <u>CSCI 0170</u>: Computer Science: An Integrated Introduction (part 1).

Fall 2017

• <u>CSCI 0050</u>: A Data-Centric Introduction to Programming.

Summer 2018 Spring 2019

o CSCI 0180: Computer Science: An Integrated Introduction (part 2).

Jan 2017 - Current

• Mentor, Trip Leader, Food Manager

Brown Outdoor Leadership Training (BOLT), Brown University

- o Mentor: Trained leaders in facilitation, mentorship, and technical skills to lead backpacking trips (2018, 2019).
- Food Manager: Purchased, organized, and divided food for 18 backpacking trips in the White Mountains.
- Leader: Led a 5 day trip with 8 sophomores, transfers, and RUE students in the White Mountains, continuing with a mentorship program in the subsequent semester.
- Leader Training: Received 200 hours of training in facilitation, leadership, diversity, and technical and medical skills preparing for the trip.

• Research Assistant

Jun - Aug 2017

Fox-Kemper Physical Oceanography Lab, Brown University

• Stochastic Differential Equations: Developed a tool to model systems of nonlinear stochastic ordinary differential equations.

• Research Experiences for Undergraduates Student Intern

Jun 2016 - Aug 2016

LIGO Scientific Collaboration, Louisiana State University, Dr. Gabriela Gonzalez (mentor)

Baton Rouge, LA

- Independent Research: Characterized transient noise signals in the LIGO detectors.
- o Poster: Created a digital poster, working with LSU's tangible visualization research group.

• Information Technology Intern

Oakwood Friends School

Jun 2015 - Sep 2015

Poughkeepsie, NY

• Web Apps: Developed a series of web apps for internal use; see eliasberkowitz.com.

SKILLS

- Programming Languages: Python, Javascript, Java, Scala, MATLAB, Bash, LATEX, Racket, OCaml, Google Apps Script, Mathematica, Arduino.
- Tutoring: Experience tutoring college and high school level Math and programming.
- Languages: Portuguese (fluent), German (beginner level).
- Medical Certifications: CPR, Wilderness First Responder (WFR).
- Music: Piano (classical), Flute (classical).