# Elias Berkowitz

http://www.eliasberkowitz.com

#### **EDUCATION**

## • Brown University

Sep 2015 - 2019

Email: elias\_berkowitz@brown.edu

Github: github.com/berkowitze

Bachelors of Science in Applied Mathematics.

Providence, RI

- Relevant Coursework: Differential Equations (2), Fluid Mechanics (2), Mathematics of Climate, Computational Physics, Statistics (2), Complex Analysis, Dynamical Systems (2), Physical Oceanography, Atmospheric Dynamics, Solid Earth Geophysics, and Computer Science (3).
- Open Rocketry Initiative: Started the first experimental rocketry club at Brown (github).
- o Grants: Brown Maker Grant. Rhode Island Space Grant.

### • Oakwood Friends School

Sep 2014 - Jun 2015

High School Diploma. Senior year. Coursework in Robotics, Web Programming, Python.

Poughkeepsie, NY

• Colegio Objetivo

Jul 2013 - Jun 2014

Rotary Youth Exchange student. Completed junior year of high school in Brazilian high school.

 $Campinas,\ Brazil$ 

• F. D. Roosevelt High School

Sep 2011 - Jun 2013

Freshman and sophomore years. Coursework in Chemistry; Rotary Club

Hyde Park, NY

#### WORK EXPERIENCE

#### • Research Assistant

Jun 2017 - Aug 2017

Fox-Kemper Physical Oceanography Lab, Brown University

Providence, RI

- $\circ\,$  Supervisor: Dr. Baylor Fox-Kemper
- Stochastic Differential Equations: Developed a tool to model systems of nonlinear stochastic differential equations in arbitrary dimensions.

### • Trip Leader and Food Manager

Jan 2017 - Current

Brown Outdoor Leadership Training (BOLT), Brown University

Providence, RI

- Leader: Led a 5 day trip with 8 sophomores, transfers, and RUE students in the White Mountains.
- Food Manager: Purchased, organized, and divided food for 18 backpacking trips in the White Mountains.
- Leader Training: Had over 200 hours of training in the Spring 2017 semester preparing for the trip, including Wilderness First Responder training.

### • Research Experiences for Undergraduates Student Intern

Jun 2016 - Aug 2016 Baton Rouge, LA

LIGO Scientific Collaboration, Louisiana State University

- o Mentor: Dr. Gabriela Gonzalez
- Research: Characterized transient noise signals in the LIGO detectors.
- Poster: Created and presented a digital poster of my research, working with a tangible visualization lab.

# • Information Technology Intern

Jun 2015 - Sep 2015 Poughkeepsie, NY

Oakwood Friends School

- Web Development: Redesigned the school website, implementing a CMS and improving load speed.
- Web Apps: Developed a series of web apps for internal use; see <u>eliasberkowitz.com</u>.

### TEACHING EXPERIENCE

#### • Teaching Assistant

Sep 2017 - Dec 2017

Introductory Computer Science, Brown University

Providence, RI

- Undergraduate TA: TA for the main introductory Computer Science course at Brown, CS17.
- Tutor and Teacher's Assistant

Jun 2015 - Current

- Math Resource Center Tutor: Help students with introductory math courses.
- **SAT Tutoring**: Tutored several students for the Math SAT.
- Hope High School: Assist a teacher teaching intermediate algebra courses.
- CubeSAT: Developed and taught a physics curriculum for West Broadway Middle School.

### SKILLS

- Languages: Portuguese (fluent), German (intermediate level)
- Music: Piano (classical), Flute (orchestra, band, classical)
- Programming Languages: Python, MATLAB, LATEX, CAD, Racket, OCaml, Javascript, Google Apps Script, Mathematica, Arduino (C, C++).