

# Alexey Izmailov

Sc.B.

Department of Applied Mathematics, Brown University  
Providence, Rhode Island, USA, 02912

✉ alizma@brown.edu

🏠 alizma.github.io · 🌐 alizma · 📄 alizma0

## TECHNICAL COURSEWORK

- **Mathematics:** Applied Dynamical Systems, Topics in Abstract Algebra, Real Analysis, Statistical Inference, Linear Algebra, Applied Ordinary & Partial Differential Equations, Single & Multivariable Calculus, Advanced Classical Mechanics, Modern Physics (Stanford OHS)
- **Computer Science:** Fundamentals of Computer Systems, Blockchains and Cryptocurrencies, Accelerated Introduction to CS, AP CS A
- **Directed Reading Programs:** Graduate Linear Algebra and Functional Analysis. Official write-up: [https://github.com/alizma/Spring2021\\_Functional\\_Analysis\\_Paper](https://github.com/alizma/Spring2021_Functional_Analysis_Paper).

## PROFESSIONAL EXPERIENCE

### Teaching Assistant

#### Abstract Algebra (Math1530) Lead TA

Brown University

May 2021 – Aug 2021

Provided weekly feedback on problem sets and held weekly office hours for a class of 30.

### Everaise Academy

#### Curriculum Developer and TA

Virtual

Jun 2020 – Present

- Official Website: [everaise.org](https://everaise.org)
- Composed several handouts on topics ranging from number theory to combinatorics and graded homework for over 100 students in the advanced topics course.

### Mathnasium

#### High School Math Tutor

Scottsdale, AZ

Mar 2020 – Sep 2020

## EDUCATION

### Brown University (In Progress)

Bs.C. in Applied Mathematics, Computer Science

Advisor: Prof. Hongjie Dong

Rhode Island, USA

Sep 2020 – May 2024

### Brophy College Preparatory

High School Diploma with Distinction (Mathematics)

Arizona, USA

Aug 2016 – May 2020

## AWARDS

USA Math Talent Search Bronze (2018, 2020), Silver (2019) Winner

Top 40 Nationally

USA National Chemistry Olympiad Semi-Finalist

Top 1000 Nationally

Google Code Jam Round 2 Qualifier

Top 30,000 Internationally

USA Computing Olympiad Silver Winner

Top 5,000 Nationally

AP National Scholar + National Distinction

Top 1% Nationally

## PERSONAL PROJECTS

### Kibibyte: Text Editor in <1 KiB

Programming

Implemented in C with VT100 syntax highlighting, Vim-like scrolling, and edit history. Portable for all POSIX-compliant systems. See more: [https://github.com/alizma/kilo\\_text\\_editor](https://github.com/alizma/kilo_text_editor).

## SKILLS

**Programming** GoLang, Solidity, C/C++, Python,  $\text{\LaTeX}$ , Bash, Markdown

**Tools** Vim, Git, VSCode, NMap, Linux

**Languages** English, Russian, Spanish (Conversational, 5 on AP)