

# Alexey Izmailov

Sc.B.

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## 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 100 students in the advanced topics course.

## 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

### USAMTS Bronze (2017, 2019), Silver (2018) Winner

Top 40 Nationally

Active competitor in USA Mathematical Talent Search.

### USA National Chemistry Olympiad Semi-Finalist

Top 1000 Nationally

Competed in the premier chemistry competition for high school students in the USA.

### USA Computing Olympiad Silver Winner

Top 5,000 Nationally

Active competitor in premier computing olympiad for high school students in the USA.

### AP National Scholar + National Distinction

Top 1% Nationally

Awarded for high scores on 16 AP exams in high school.

## 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,  $\LaTeX$ , Bash, Markdown

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

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