

D. Zack Garza

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| EDUCATION | University of Georgia , Athens, GA, USA | Aug 2019 – Present |
| | ▪ Ph.D. in Mathematics (Expected) | |
| | University of California, San Diego , La Jolla, CA, USA | Aug 2015 – Jun 2018 |
| | ▪ B.S. Mathematics ▪ Minor in Computer Science ▪ Major GPA: 3.723 | |
| | University of California, Berkeley , Berkeley, CA, USA | Sep 2014 – Jun 2015 |
| | ▪ Concurrent Enrollment • CS 70: Discrete Mathematics and Probability Theory • EE 20: Structure and Interpretation of Systems and Signals ▪ Cumulative GPA: 3.33 | |
| | Sierra College , Rocklin, California, USA | Sep 2011 – Jun 2014 |
| | ▪ A.A. Mathematics ▪ A.S. Physics ▪ A.A. Fine Arts | |
| WORKSHOPS AND TALKS | ▪ Mathematics Subject GRE Workshop | Mar 2019 |
| | ▪ Homotopy and the Hopf Fibration | Jun 2018 |
| | ▪ Topological Fixed Point Theorems | Mar 2018 |
| | ▪ Homology and The Snake Lemma | Nov 2017 |
| | ▪ Algebraic Geometry: A Historical Primer | Oct 2017 |
| | ▪ Introduction to Functional Programming | Oct 2017 |
| | ▪ Intermediate LaTeX | May 2017 |
| | ▪ Introduction to LaTeX | Apr 2017 |
| | ▪ Intermediate LaTeX | Feb 2017 |
| | ▪ Organizing Research Projects with LaTeX | Jan 2017 |
| | ▪ Category Theory as an Organizational Tool | Jan 2017 |
| | ▪ Introduction to LaTeX | Nov 2016 |
| | ▪ Introduction to Category Theory, Part 2 | Nov 2016 |
| | ▪ Introduction to Category Theory, Part 1 | Oct 2016 |
| | ▪ Haskell for Mathematicians | Oct 2016 |
| | ▪ Discrete Mathematics: Graphs and Trees | May 2014 |
| AWARDS | ▪ UC San Diego Academic Enrichment Program | |
| | Summer Undergraduate Research Scholarship (Declined) | 2018 |
| | ▪ Diana C. Miles Scholarship | 2017 – 2018 |
| | ▪ Errett Bishop Scholarship | 2016 – 2017 |
| | ▪ Richard L. and Fern W. Erion and Laidlaw-Erion Scholarship | 2016 – 2017 |
| | ▪ Provost Honors (Muir College, UC San Diego) | 2015 – 2016 |
| SERVICE | President, Society of Undergraduate Mathematics Students , UC San Diego | 2016 – 2018 |
| | Officer, Mathematics Club , Sierra College | 2013 – 2014 |
| TEACHING | University of Georgia | |
| | ▪ Graduate School Teaching Seminar (GRSC 7770) | Fall 2019 |
| | Private Tutoring | 2014 – Present |

- Calculus, Linear Algebra, Differential Equations, Real Analysis, Abstract Algebra, Complex Analysis, Point-Set Topology, Number Theory, Probability

WORK EXPERIENCE

Retail Scientifics, San Diego, CA

Jan 2016 – Aug 2019

- Data Scientist & Full Stack Engineer
 - API development for real-time predictive modeling and machine learning.

Google Summer of Code, Berkeley, CA

Apr 2015 – Aug 2015

- Student Developer
 - Contributed Haskell code to the open source project Hackage.

Shutterfly, Santa Clara, CA

Jun 2014 – Jan 2015

- Software Engineer, Intern/Contractor
 - Server-side compute graphics engine development in OpenGL for rendering 3D models.

COURSEWORK

Graduate Coursework

- Algebraic Topology
- Quantum Mechanics for Mathematicians
- Functional Analysis
- Algebra

Fall 2017 – Spring 2018
Spring 2017
Fall 2016 – Winter 2017
Fall 2017

Undergraduate Coursework

- Cryptography
- Numerical Methods and Physical Modeling
- Image Processing
- Applied Linear Algebra
- Partial Differential Equations
- Computer Vision
- Complex Analysis
- History of Mathematics (Hyperbolic Geometry)
- Theory of Computation
- Introductory Machine Learning
- Discrete Math and Graph Theory
- Design and Analysis of Algorithms
- Number Theory
- Advanced Data Structures
- Knot Theory
- Point-Set Topology
- Mathematical Algorithms and Systems Analysis in Computer Science
- Probability
- Software Tools and Techniques
- Combinatorics
- Abstract Algebra
- Real Analysis
- Mathematical Reasoning and Proof
- Vector Calculus
- Structure and Interpretation of Signals and Systems
- Assembly Programming (x86)
- C++ Programming
- Finite Mathematics and Linear Programming
- Discrete Mathematics and Probability Theory
- Structure and Interpretation of Computer Programs (Python)
- Elementary Statistics
- Introduction to Unix
- Discrete Mathematics
- Electrical Circuit Theory

Winter 2018
Fall 2017
Fall 2017
Summer 2017
Summer 2017
Spring 2017
Spring 2017
Spring 2017
Winter 2017
Winter 2017
Winter 2017
Fall 2016
Summer 2016
Spring 2016
Spring 2016
Winter 2015
Winter 2015
Winter 2015
Fall 2015
Fall 2015 – Spring 2016
Fall 2015 – Spring 2016
Summer 2015
Summer 2015
Spring 2015
Spring 2015
Spring 2015
Spring 2015
Fall 2014
Fall 2014
Summer 2014
Summer 2014
Spring 2014
Spring 2014

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|---|---------------------------|
| ▪ Differential Equations and Linear Algebra | Spring 2014 |
| ▪ Data Structures | Fall 2012 |
| ▪ General Chemistry | Spring 2013 – Summer 2013 |
| ▪ Physics: Mechanics, Electromagnetism, Optics, and Waves | Fall 2012 – Spring 2013 |
| ▪ Calculus: Single and Multivariable | Fall 2012 – Spring 2013 |
| ▪ Systems Programming with C | Fall 2012 |
| ▪ Discrete Structures in Computer Science | Fall 2012 |
| ▪ Object-Oriented Programming | Spring 2012 |