# D. Zack Garza

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<b>EDUCATION</b>	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
	<ul><li>B.S. Mathematics</li><li>Minor in Computer Science</li></ul>	
	Major GPA: 3.723	
	University of California, Berkeley, Berkeley, CA, USA	Sep 2014 – Jun 2015
	<ul> <li>Concurrent Enrollment</li> <li>CS 70: Discrete Mathematics and Probability Theory</li> <li>EE 20: Structure and Interpretation of Systems and Signals</li> <li>Cumulative GPA: 3.33</li> </ul>	
	Sierra College, Rocklin, California, USA	Sep 2011 – Jun 2014
	<ul> <li>A.A. Mathematics</li> <li>A.S. Physics</li> <li>A.A. Fine Arts</li> </ul>	
WORKSHOPS AND	<ul> <li>Mathematics Subject GRE Workshop</li> </ul>	Mar 2019
TALKS	<ul> <li>Homotopy and the Hopf Fibration</li> </ul>	Jun 2018
	<ul> <li>Topological Fixed Point Theorems</li> </ul>	Mar 2018
	<ul> <li>Homology and The Snake Lemma</li> </ul>	Nov 2017
	Algebraic Geometry: A Historical Primer      Attack action to Eventional Programming	Oct 2017
	■ Introduction to Functional Programming ■ Intermediate LAT <sub>E</sub> X	Oct 2017 May 2017
	■ Introduction to LATEX	Apr 2017
	■ Intermediate L <sup>A</sup> T <sub>E</sub> X	Feb 2017
	Organizing Research Projects with LATEX	Jan 2017
	<ul> <li>Category Theory as an Organizational Tool</li> </ul>	Jan 2017
	■ Introduction to L <sup>A</sup> T <sub>E</sub> X	Nov 2016
	<ul><li>Introduction to Category Theory, Part 2</li><li>Introduction to Category Theory, Part 1</li></ul>	Nov 2016 Oct 2016
	<ul> <li>Haskell for Mathematicians</li> </ul>	Oct 2016
	<ul> <li>Discrete Mathematics: Graphs and Trees</li> </ul>	May 2014
AWARDS	<ul> <li>UC San Diego Academic Enrichment Program</li> </ul>	
	Summer Undergraduate Research Scholarship (Declined)	2018
	Diana C. Miles Scholarship	2017 – 2018
	<ul><li>Errett Bishop Scholarship</li><li>Richard L. and Fern W. Erion and Laidlaw-Erion Scholarship</li></ul>	2016 – 2017 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	
	<ul> <li>Graduate School Teaching Seminar (GRSC 7770)</li> </ul>	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, time-series forecasting, 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

Fall 2014

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

#### **COURSEWORK**

#### **Graduate Coursework**

<ul> <li>Algebraic Topology</li> </ul>	Fall 2017 – Spring 2018
<ul> <li>Quantum Mechanics for Mathematicians</li> </ul>	Spring 2017
<ul> <li>Functional Analysis</li> </ul>	Fall 2016 – Winter 2017
■ Algebra	Fall 2017

## **Undergraduate Coursework**

<ul> <li>Cryptography</li> <li>Numerical Methods and Physical Modeling</li> <li>Image Processing</li> </ul>	Winter 2018 Fall 2017 Fall 2017
Applied Linear Algebra	Summer 2017
<ul> <li>Partial Differential Equations</li> </ul>	Summer 2017
■ Computer Vision	Spring 2017
■ Complex Analysis	Spring 2017
<ul> <li>History of Mathematics (Hyperbolic Geometry)</li> </ul>	Spring 2017
■ Theory of Computation	Winter 2017
■ Introductory Machine Learning	Winter 2017
■ Discrete Math and Graph Theory	Winter 2017
<ul> <li>Design and Analysis of Algorithms</li> </ul>	Fall 2016
■ Number Theory	Summer 2016
<ul> <li>Advanced Data Structures</li> </ul>	Spring 2016
■ Knot Theory	Spring 2016
■ Point-Set Topology	Winter 2015
Mathematical Algorithms and Contains Analysis in Contains Coins	TAT: 4 2015

• Knot Theory	Spring 2016
■ Point-Set Topology	Winter 2015
<ul> <li>Mathematical Algorithms and Systems Analysis in Computer Science</li> </ul>	Winter 2015
■ Probability	Winter 2015
<ul> <li>Software Tools and Techniques</li> </ul>	Winter 2015
<ul><li>Combinatorics</li></ul>	Fall 2015
■ Abstract Algebra	Fall 2015 – Spring 2016
■ Real Analysis	Fall 2015 – Spring 2016

<ul> <li>Mathematical Reasoning and Proof</li> </ul>	Summer 2015
<ul> <li>Vector Calculus</li> </ul>	Summer 2015
<ul> <li>Structure and Interpretation of Signals and Systems</li> </ul>	Spring 2015
<ul> <li>Assembly Programming (x86)</li> </ul>	Spring 2015

C++ Programming
 Finite Mathematics and Linear Programming
 Discrete Mathematics and Probability Theory
 Fall 2014

Elementary Statistics
 Introduction to Unix
 Discrete Mathematics
 Electrical Circuit Theory
 Summer 2014
 Spring 2014
 Spring 2014

Structure and Interpretation of Computer Programs (Python)

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