

# D. Zack Garza

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EDUCATION	<b>University of Georgia</b> , Athens, GA, USA	Aug 2019 – Present
	▪ Ph.D. in Mathematics (Expected)	
	<b>University of California, San Diego</b> , La Jolla, CA, USA	Aug 2015 – Jun 2018
	▪ B.S. Mathematics ▪ Minor in Computer Science ▪ Major GPA: 3.723	
	<b>University of California, Berkeley</b> , Berkeley, CA, USA	Sep 2014 – Jun 2015
	▪ Concurrent Enrollment <ul style="list-style-type: none"><li>• CS 70: Discrete Mathematics and Probability Theory</li><li>• EE 20: Structure and Interpretation of Systems and Signals</li></ul>	
	▪ Cumulative GPA: 3.33	
	<b>Sierra College</b> , Rocklin, California, USA	Sep 2011 – Jun 2014
	▪ A.A. Mathematics ▪ A.S. Physics ▪ A.A. Fine Arts	
TEACHING	University of Georgia	
	▪ Graduate School Teaching Seminar 1GRSC 7770)	Fall 2019
	Private Tutoring	2014 – Present
	▪ Calculus, Linear Algebra, Differential Equations, Real Analysis, Abstract Algebra, Complex Analysis, Point-Set Topology, Number Theory, Probability	
AWARDS & SCHOLARSHIPS	▪ 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
CAMPUS ACTIVITIES	<b>Society of Undergraduate Mathematics Students</b> , University of California, San Diego	2016 – 2018
	▪ President	
	<b>Mathematics Club</b> , Sierra College	2013 – 2014
	▪ Officer	
TECHNICAL SKILLS	Android, C, C++, ECMAScript, Bash, Git, HTML5/CSS3, Haskell, Java, Javascript, $\LaTeX$ , MATLAB, Node, NumPy, OpenGL, PHP, Python, R, SAGE, SQL, Unix/Linux	
WORKSHOPS AND TALKS GIVEN	▪ 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

	<ul style="list-style-type: none"> <li>▪ Introduction to LaTeX</li> <li>▪ Introduction to Category Theory, Part 2</li> <li>▪ Introduction to Category Theory, Part 1</li> <li>▪ Haskell for Mathematicians</li> <li>▪ Discrete Mathematics: An Overview of Graphs and Trees</li> </ul>	<p>Nov 2016</p> <p>Nov 2016</p> <p>Oct 2016</p> <p>Oct 2016</p> <p>May 2014</p>
<b>WORK EXPERIENCE</b>	<p><b>Retail Scientifics</b>, San Diego, CA</p> <ul style="list-style-type: none"> <li>▪ Data Scientist &amp; Full Stack Engineer <ul style="list-style-type: none"> <li>• API development for real-time predictive modeling and machine learning.</li> </ul> </li> </ul> <p><b>Google Summer of Code</b>, Berkeley, CA</p> <ul style="list-style-type: none"> <li>▪ Student Developer <ul style="list-style-type: none"> <li>• Contributed Haskell code to the open source project Hackage.</li> </ul> </li> </ul> <p><b>Shutterfly</b>, Santa Clara, CA</p> <ul style="list-style-type: none"> <li>▪ Software Engineer, Intern/Contractor <ul style="list-style-type: none"> <li>• Server-side compute graphics engine development in OpenGL for rendering 3D models.</li> </ul> </li> </ul>	<p>Jan 2016 – Aug 2019</p> <p>Apr 2015 – Aug 2015</p> <p>Jun 2014 – Jan 2015</p>
<b>COURSEWORK</b>	<p><b>Graduate Coursework</b></p> <ul style="list-style-type: none"> <li>▪ Algebraic Topology</li> <li>▪ Topics in Real Analysis: Quantum Mechanics (Graduate)</li> <li>▪ Functional Analysis</li> <li>▪ Algebra</li> </ul> <p><b>Undergraduate Coursework</b></p> <ul style="list-style-type: none"> <li>▪ Cryptography</li> <li>▪ Numerical Methods and Physical Modeling</li> <li>▪ Image Processing</li> <li>▪ Applied Linear Algebra</li> <li>▪ Partial Differential Equations</li> <li>▪ Computer Vision</li> <li>▪ Complex Analysis</li> <li>▪ History of Mathematics (Hyperbolic Geometry)</li> <li>▪ Theory of Computation</li> <li>▪ Introductory Machine Learning</li> <li>▪ Discrete Math and Graph Theory</li> <li>▪ Design and Analysis of Algorithms</li> <li>▪ Number Theory</li> <li>▪ Advanced Data Structures</li> <li>▪ Knot Theory</li> <li>▪ Point-Set Topology</li> <li>▪ Mathematical Algorithms and Systems Analysis in Computer Science</li> <li>▪ Probability</li> <li>▪ Software Tools and Techniques</li> <li>▪ Combinatorics</li> <li>▪ Abstract Algebra</li> <li>▪ Real Analysis</li> <li>▪ Mathematical Reasoning and Proof</li> <li>▪ Vector Calculus</li> <li>▪ Structure and Interpretation of Signals and Systems</li> <li>▪ Assembly Programming (x86)</li> <li>▪ C++ Programming</li> <li>▪ Finite Mathematics and Linear Programming</li> <li>▪ Discrete Mathematics and Probability Theory</li> <li>▪ Structure and Interpretation of Computer Programs (Python)</li> <li>▪ Elementary Statistics</li> <li>▪ Introduction to Unix</li> </ul>	<p>Fall 2017 – Spring 2018</p> <p>Spring 2017</p> <p>Fall 2016 – Winter 2017</p> <p>Fall 2017</p> <p>Winter 2018</p> <p>Fall 2017</p> <p>Fall 2017</p> <p>Summer 2017</p> <p>Summer 2017</p> <p>Spring 2017</p> <p>Spring 2017</p> <p>Spring 2017</p> <p>Winter 2017</p> <p>Winter 2017</p> <p>Winter 2017</p> <p>Fall 2016</p> <p>Summer 2016</p> <p>Spring 2016</p> <p>Spring 2016</p> <p>Winter 2015</p> <p>Winter 2015</p> <p>Winter 2015</p> <p>Winter 2015</p> <p>Fall 2015</p> <p>Fall 2015 – Spring 2016</p> <p>Fall 2015 – Spring 2016</p> <p>Summer 2015</p> <p>Summer 2015</p> <p>Spring 2015</p> <p>Spring 2015</p> <p>Spring 2015</p> <p>Spring 2015</p> <p>Fall 2014</p> <p>Fall 2014</p> <p>Summer 2014</p> <p>Summer 2014</p>

▪ Discrete Mathematics	Spring 2014
▪ Electrical Circuit Theory	Spring 2014
▪ 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