

D. Zack Garza

3667 Christine Street, San Diego, CA, 92117
dzackgarza@gmail.com • +1 (530) 210-9130 • <https://www.dzackgarza.com>

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	
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	Society of Undergraduate Mathematics Students , University of California, San Diego	2016 – 2018
	▪ President	
	Mathematics Club , 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"> ▪ Introduction to LaTeX ▪ Introduction to Category Theory, Part 2 ▪ Introduction to Category Theory, Part 1 ▪ Haskell for Mathematicians ▪ Discrete Mathematics: An Overview of Graphs and Trees 	<p>Nov 2016</p> <p>Nov 2016</p> <p>Oct 2016</p> <p>Oct 2016</p> <p>May 2014</p>
WORK EXPERIENCE	Retail Scientifics , San Diego, CA	Jan 2016 – Aug 2019
	<ul style="list-style-type: none"> ▪ Data Scientist & Full Stack Engineer <ul style="list-style-type: none"> • API development for real-time predictive modeling and machine learning. 	
	Google Summer of Code , Berkeley, CA	Apr 2015 – Aug 2015
	<ul style="list-style-type: none"> ▪ Student Developer <ul style="list-style-type: none"> • Contributed Haskell code to the open source project Hackage. 	
	Shutterfly , Santa Clara, CA	Jun 2014 – Jan 2015
	<ul style="list-style-type: none"> ▪ Software Engineer, Intern/Contractor <ul style="list-style-type: none"> • Server-side compute graphics engine development in OpenGL for rendering 3D models. 	
COURSEWORK	Graduate Coursework	
	<ul style="list-style-type: none"> ▪ Algebraic Topology ▪ Topics in Real Analysis: Quantum Mechanics (Graduate) ▪ Functional Analysis ▪ Algebra 	<p>Fall 2017 – Spring 2018</p> <p>Spring 2017</p> <p>Fall 2016 – Winter 2017</p> <p>Fall 2017</p>
	Undergraduate Coursework	
	<ul style="list-style-type: none"> ▪ 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 	<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