

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	
TEACHING	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 OpenGL engine development for rendering 3D models.	
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
▪ 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: An Overview of Graphs and Trees	May 2014

COURSEWORK

Graduate Coursework

▪ Algebraic Topology	Fall 2017 – Spring 2018
▪ Topics in Real Analysis: Quantum Mechanics (Graduate)	Spring 2017
▪ Functional Analysis	Fall 2016 – Winter 2017
▪ Algebra	Fall 2017

Undergraduate Coursework

▪ Cryptography	Winter 2018
▪ Numerical Methods and Physical Modeling	Fall 2017
▪ Image Processing	Fall 2017
▪ Applied Linear Algebra	Summer 2017
▪ Partial Differential Equations	Summer 2017
▪ Computer Vision	Spring 2017
▪ Complex Analysis	Spring 2017
▪ History of Mathematics (Hyperbolic Geometry)	Spring 2017
▪ Theory of Computation	Winter 2017
▪ Introductory Machine Learning	Winter 2017
▪ Discrete Math and Graph Theory	Winter 2017
▪ Design and Analysis of Algorithms	Fall 2016
▪ Number Theory	Summer 2016
▪ Advanced Data Structures	Spring 2016
▪ Knot Theory	Spring 2016
▪ Point-Set Topology	Winter 2015
▪ Mathematical Algorithms and Systems Analysis in Computer Science	Winter 2015
▪ Probability	Winter 2015
▪ Software Tools and Techniques	Winter 2015
▪ Combinatorics	Fall 2015
▪ Abstract Algebra	Fall 2015 – Spring 2016
▪ Real Analysis	Fall 2015 – Spring 2016
▪ Mathematical Reasoning and Proof	Summer 2015
▪ Vector Calculus	Summer 2015
▪ Structure and Interpretation of Signals and Systems	Spring 2015
▪ Assembly Programming (x86)	Spring 2015
▪ C++ Programming	Spring 2015
▪ Finite Mathematics and Linear Programming	Spring 2015
▪ Discrete Mathematics and Probability Theory	Fall 2014
▪ Structure and Interpretation of Computer Programs (Python)	Fall 2014
▪ Elementary Statistics	Summer 2014
▪ Introduction to Unix	Summer 2014
▪ 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