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	
PRESENTATIONS	■ Poster: Spectral Sequences and Higher Homotopy Groups of Spheres	
	UC San Diego Undergraduate Research Symposium	May 2018
WORKSHOPS AND	 Mathematics Subject GRE Workshop 	Mar 2019
TALKS	 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 Intermediate LATEX 	Oct 2017 May 2017
	■ Introduction to LATEX	Apr 2017
	■ Intermediate LATEX	Feb 2017
	 Organizing Research Projects with L^AT_EX 	Jan 2017
	 Category Theory as an Organizational Tool 	Jan 2017
	■ Introduction to L ^A T _E X	Nov 2016
	Introduction to Category Theory, Part 2	Nov 2016
	Introduction to Category Theory, Part 1Haskell for Mathematicians	Oct 2016 Oct 2016
	 Discrete Mathematics: Graphs and Trees 	May 2014
AMADDE	- LIC Can Diago Academia Envishment Drogram	
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	
IEACHING		Fall 2019
	 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, 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

2010

Winter 2018

Fall 2015 – Spring 2016

- Software Engineer, Intern/Contractor
 - Developed server-side OpenGL 3D graphics engine and associated mathematical libraries.

CONFERENCES

 University of Maryland Geometry Festival 	May 2019
 Arizona Winter School: Topology and Arithmetic 	Apr 2019
 UC San Diego Complex Algebraic Geometry 	Jan 2019
 Witt Vectors, Deformations, and Absolute Geometry 	Jun 2018
 Latinx in the Mathematical Sciences 	Mar 2018

COURSEWORK

Graduate Coursework

 Algebraic Topology 	Fall 2017 – Spring 2018
 Quantum Mechanics for Mathematicians 	Spring 2017
■ Functional Analysis	Fall 2016 – Winter 2017
■ Algebra	Fall 2017

Undergraduate Coursework

Cryptography

■ Real Analysis

 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

 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 Discrete Mathematics and Probability Theory Structure and Interpretation of Computer Programs (Python) 	Spring 2015 Fall 2014 Fall 2014
Elementary StatisticsIntroduction to Unix	Summer 2014 Summer 2014
Discrete Mathematics	Spring 2014
Electrical Circuit TheoryDifferential Equations and Linear Algebra	Spring 2014 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