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

Winter 2018 Fall 2017

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

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

 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

Summer 2016
Spring 2016
Spring 2016
Winter 2015
Winter 2015
Winter 2015
Winter 2015
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
 Structure and Interpretation of Computer Programs (Python)
 Fall 2014

Elementary Statistics
 Introduction to Unix
 Discrete Mathematics
 Summer 2014
 Spring 2014

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