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

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

- 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

Society of Undergraduate Mathematics Students, UC San Diego — 2016 – 2018

- President

Mathematics Club, Sierra College — 2013 – 2014

- Officer

WORKSHOPS AND TALKS

- 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

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 compute graphics engine development in OpenGL for rendering 3D models.

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

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