## D. Zack Garza

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PDUCATION			
	<b>EDUCATION</b>	University of Georgia, Athens,GA, USA	Aug 2019 – Present
B.S. Mathematics   Minor in Computer Science   Minor in Computer Science   Minor in Computer Science   Minor in Computer Science   Minor GPA: 3,723		■ Ph.D. in Mathematics (Expected)	
B.S. Mathematics   Minor in Computer Science   Minor in Computer Science   Minor in Computer Science   Minor in Computer Science   Minor GPA: 3,723		University of California, San Diego, La Jolla, CA, USA	Aug 2015 – Jun 2018
University of California, Berkeley, Berkeley, CA, USA  CONCURTENT ENDIMENT  CONCURTENT ENDIA CONCURTENT  CON			
Concurrent Enrollment   Concurrent   Concurrent Enrollment   Concurrent Enro			
**Concurrent Enrollment **CS 70: Discrete Mathematics and Probability Theory **E2: Des Structure and Interpretation of Systems and Signals **Cumulative GPA: 3.33  **Seirra College, Rocklin, California, USA **A.A. Mathematics **A.S. Physics **A.A. Fine Arts  **TEACHING**  **University of Georgia **Graduate School Teaching Seminar **Fall 2019 **Private Tutoring **Calculus, Linear Algebra, Differential Equations, Real Analysis, Abstract Algebra, Complex Analysis, Point-Set Topology, Number Theory, Probability  **WORK EXPERIENCE**  **Retail Scientifics, San Diego, CA **Data Scientist & Full Stack Engineer **API development for real-time predictive modeling and machine learning.  **Google Summer of Code, Berkeley, CA **Student Developer **Contributed Haskell code to the open source project Hackage.  **Student Developer **Contributed Haskell code to the open source project Hackage.  **Student Developer **Contributed Haskell code to the open source project Hackage.  **Student Developer **Contributed Haskell code to the open source project Hackage.  **Student Developer **Contributed Haskell code to the open source project Hackage.  **Student Developer **Contributed Haskell code to the open source project Hackage.  **Student Developer **Contributed Haskell code to the open source project Hackage.  **Student Developer **Contributed Haskell code to the open source project Hackage.  **Student Developer **Contributed Haskell code to the open source project Hackage.  **Student Developer **Contributed Haskell code to the open source project Hackage.  **Student Developer **Contributed Haskell code to the open source project Hackage.  **Student Developer **Contributed Haskell code to the open source project Hackage.  **Student Developer **Contributed Haskell Code to the open source project Hackage.  **Student Developer **Contributed Haskell Code to the open source project Hackage.  **Student Developer **Contributed Haskell Code to the open source project Hackage.  **Student Developer **Contributed Haskell Code to the open sourc		■ Major GPA: 3.723	
CS 701 Discrete Mathematics and Probability: Theory		University of California, Berkeley, Berkeley, CA, USA	Sep 2014 – Jun 2015
Sierra College, Rocklin, California, USA  A.A. Mathematics A.S. Physics A.A. Fine Arts  TEACHING  Inviersity of Georgia Graduate School Teaching Seminar Fall 2019 Fivate Tutoring Calculus, Linear Algebra, Differential Equations, Real Analysis, Abstract Algebra, Complex Analysis, Point-Set Topology, Number Theory, Probability  Retail Scientifics, San Diego, CA EXPERIENCE Subtent Developer Apil development for real-time predictive modeling and machine learning.  Google Summer of Code, Berkeley, CA Suttent Ty, Santa Clara, CA Software Engineer, Intern/Contractor		<ul><li>CS 70: Discrete Mathematics and Probability Theory</li><li>EE 20: Structure and Interpretation of Systems and Signals</li></ul>	
**A.A. Mathematics **A.S. Physics **A.A. Fine Arts  **TEACHING**  **University of Georgia **Graduate School Teaching Seminar **Fall 2019 Private Tutoring **2014 – Present **Calculus, Linear Algebra, Differential Equations, Real Analysis, Abstract Algebra, Complex Analysis, Point-Set Topology, Number Theory, Probability  **WORK**  **Retal Scientifics, San Diego, CA**  **Datas Scientists & Full Stack Engineer **API development for real-time predictive modeling and machine learning.  **Google Summer of Code, Berkeley, CA**  **Student Developer **Contributed Haskell code to the open source project Hackage.  **Shutterfly, Santa Clara, CA**  **Software Engineer, Intern/Contractor **Server-side compute graphics engine development in OpenGL for rendering 3D models.  **AWARDS & SCHOLARSHIPS**  **Diana C. Miles Scholarship **Errett Bishop S		■ Cumulative GPA: 3.33	
* A.S. Physics * A.A. Fine Arts  TEACHING  **Inversity of Georgia** **Graduate School Teaching Seminar* **Private Tutoring** **Calculus, Linear Algebra, Differential Equations, Real Analysis, Abstract Algebra, Complex Analysis, Point-Set Topology, Number Theory, Probability*  **WORK EXPERIENCE**  **Retail Scientifics, San Diego, CA** **Palta Scientifics, Can Diego, CA** **Palta		Sierra College, Rocklin, California, USA	Sep 2011 – Jun 2014
TEACHING  University of Georgia Graduate School Teaching Seminar Fall 2019 Private Tutoring Calculus, Linear Algebra, Differential Equations, Real Analysis, Abstract Algebra, Complex Analysis, Point-Set Topology, Number Theory, Probability  WORK EXPERIENCE EXPERIENCE Fall Scientifics, San Diego, CA Data Scientist & Full Stack Engineer API development for real-time predictive modeling and machine learning. Google Summer of Code, Berkeley, CA Student Developer Contributed Haskell code to the open source project Hackage.  Shutterfly, Santa Clara, CA Suttlerfly, Santa Clara, CA Software Engineer, Intern/Contractor Server-side compute graphics engine development in OpenGL for rendering 3D models.  AWARDS & SCHOLARSHIPS CHICARSHIPS CHICARSHIPS ACTIVITIES CAMPUS ACTIVITIES CAMPUS ACTIVITIES CAMPUS ACTIVITIES CAMPUS ACTIVITIES CAMPUS ACTIVITIES AND SCICETY of Undergraduate Mathematics Students, University of California, San Diego 2016 – 2017 Provost Honors (Muir College, UC San Diego) 2016 – 2018 2017 – 2018 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2017 – 2018 2017 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2016 – 2017 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2017 – 2018 2018 – 2017 – 2018 2018 – 2017 – 2			
TEACHING    University of Georgia   Graduate School Teaching Seminar   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 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, Interm/Contractor   Server-side compute graphics engine development in OpenGL for rendering 3D models.     AWARDS & SCHOLARSHIPS   Diana C. Miles Scholarship   2016 – 2017     Errett Bishop Scholarship   2015 – 2016     Errett Bishop Scholarship   2015 – 2016     Errett Bishop Scholarship   2015 – 2017     Errett Bishop Scholarship   2015 – 201			
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  Data Scientist & Full Stack Engineer  API development for real-time predictive modeling and machine learning.  Sougle Summer of Code, Berkeley, CA  Postudent Developer  Contributed Haskell code to the open source project Hackage.  Shutterfly, Santa Clara, CA  Software Engineer, Intern/Contractor  Screver-side compute graphics engine development in OpenGL for rendering 3D models.  SCHOLARSHIPS  ACTIVITIES AND AND AND AND SCRED AND SIGNATION S		• A.A. Fille Aits	
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  **Polate 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.  AWARDS & SCHOLARSHIPS  SCHOLARSHIPS  Diana C. Miles Scholarship - Errett Bishop Scholarship - Errett Bishop Scholarship - Errett Bishop Scholarship - Errett Bishop Scholarship - Richard L. and Fern W. Erion and Laidlaw-Erion Scholarship - Richard L. and Fern W. Erion and Laidlaw-Erion Scholarship - Provost Honors (Muir College, UC San Diego)  CAMPUS ACTIVITIES  ACTIVITIES  Mathematics Club, Sierra College - Officer  TECHNICAL SKILLS  MorkshOPS AND  Mathematics Subject GRE Workshop  Mathematics Subject GRE Workshop  Mathematics Subject GRE Workshop  Mathematics Subject GRE Workshop	TEACHING	University of Georgia	
***Calculus, Linear Algebra, Differential Equations, Real Analysis, Abstract Algebra, Complex Analysis, Point-Set Topology, Number Theory, Probability  **WORK EXPERIENCE**  **Retail Scientifics, San Diego, CA**  **Data Scientist & Full Stack Engineer*  **API development for real-time predictive modeling and machine learning.*  **Google Summer of Code, Berkeley, CA**  **Student Developer*  **Contributed Haskell code to the open source project Hackage.*  **Sutterfly, Santa Clara, CA**  **Software Engineer, Intern/Contractor*  **Software Engineer, Intern/Contractor*  **Server-side compute graphics engine development in OpenGL for rendering 3D models.*  **AWARDS & SCHOLARSHIPS**  **Diana C. Miles Scholarship**  **Errett Bishop Scholarship		■ Graduate School Teaching Seminar	Fall 2019
***Calculus, Linear Algebra, Differential Equations, Real Analysis, Abstract Algebra, Complex Analysis, Point-Set Topology, Number Theory, Probability  **WORK EXPERIENCE**  **Retail Scientifics, San Diego, CA**  **Data Scientist & Full Stack Engineer*  **API development for real-time predictive modeling and machine learning.*  **Google Summer of Code, Berkeley, CA**  **Student Developer*  **Contributed Haskell code to the open source project Hackage.*  **Sutterfly, Santa Clara, CA**  **Software Engineer, Intern/Contractor*  **Software Engineer, Intern/Contractor*  **Server-side compute graphics engine development in OpenGL for rendering 3D models.*  **AWARDS & SCHOLARSHIPS**  **Diana C. Miles Scholarship**  **Errett Bishop Scholarship		Private Tutoring	2014 – Present
**Data Scientist & Full Stack Engineer		Real Analysis, Abstract Algebra, Complex Analysis,	
**Data Scientist & Full Stack Engineer	WORK	Retail Scientifics, San Diego, CA	Jan 2016 – Aug 2019
* Student Developer		■ Data Scientist & Full Stack Engineer	
* Student Developer		Google Summer of Code, Berkeley, CA	Apr 2015 – Aug 2015
Software Engineer, Intern/Contractor Server-side compute graphics engine development in OpenGL for rendering 3D models.  AWARDS & SCHOLARSHIPS  Piana C. Miles Scholarship Errett Bishop Scholarship Richard L. and Fern W. Erion and Laidlaw-Erion Scholarship Provost Honors (Muir College, UC San Diego)  CAMPUS ACTIVITIES  ACTIVITIES  Mathematics Club, Sierra College Officer  TECHNICAL SKILLS  Android, C, C++, ECMAScript, Bash, Git, HTML5/CSS3, Haskell, Java, Javascript, LATEAN, Node, NumPy, OpenGL, PHP, Python, R, SAGE, SQL, Unix/Linux  Mathematics Subject GRE Workshop  Mar 2019			
AWARDS & SCHOLARSHIPS  * Diana C. Miles Scholarship Errett Bishop Scholarship Richard L. and Fern W. Erion and Laidlaw-Erion Scholarship Provost Honors (Muir College, UC San Diego)  CAMPUS ACTIVITIES  * Bociety of Undergraduate Mathematics Students, University of California, San Diego President  Mathematics Club, Sierra College Officer  * Officer  * CEMNICAL SKILLS  * Mardroid, C, C++, ECMAScript, Bash, Git, HTML5/CSS3, Haskell, Java, Javascript, LATEX, MATLAB, Node, NumPy, OpenGL, PHP, Python, R, SAGE, SQL, Unix/Linux  * Mathematics Subject GRE Workshop  * Mat 2019		Shutterfly, Santa Clara, CA	Jun 2014 – Jan 2015
SCHOLARSHIPS■ Errett Bishop Scholarship ■ Richard L. and Fern W. Erion and Laidlaw-Erion Scholarship ■ Provost Honors (Muir College, UC San Diego)2016 – 2017 2015 – 2016CAMPUS ACTIVITIESSociety of Undergraduate Mathematics Students, University of California, San Diego ■ President2016 – 2018Mathematics Club, Sierra College ■ Officer2013 – 2014TECHNICAL SKILLSAndroid, C, C++, ECMAScript, Bash, Git, HTML5/CSS3, Haskell, Java, Javascript, LATEX, MATLAB, Node, NumPy, OpenGL, PHP, Python, R, SAGE, SQL, Unix/LinuxMar 2019WORKSHOPS AND■ Mathematics Subject GRE WorkshopMar 2019		•	
SCHOLARSHIPS■ Errett Bishop Scholarship ■ Richard L. and Fern W. Erion and Laidlaw-Erion Scholarship ■ Provost Honors (Muir College, UC San Diego)2016 – 2017 2015 – 2016CAMPUS ACTIVITIESSociety of Undergraduate Mathematics Students, University of California, San Diego ■ President2016 – 2018Mathematics Club, Sierra College ■ Officer2013 – 2014TECHNICAL SKILLSAndroid, C, C++, ECMAScript, Bash, Git, HTML5/CSS3, Haskell, Java, Javascript, LATEX, MATLAB, Node, NumPy, OpenGL, PHP, Python, R, SAGE, SQL, Unix/LinuxMar 2019WORKSHOPS AND■ Mathematics Subject GRE WorkshopMar 2019	AWARDS &	■ Diana C. Miles Scholarship	2017 – 2018
CAMPUS ACTIVITIES  Society of Undergraduate Mathematics Students, University of California, San Diego President  Mathematics Club, Sierra College 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  Mar 2019		•	
CAMPUS ACTIVITIES  Society of Undergraduate Mathematics Students, University of California, San Diego President  Mathematics Club, Sierra College 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  Mathematics Subject GRE Workshop  Mar 2019		1	
ACTIVITIES  President  Mathematics Club, Sierra College 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  MORKSHOPS AND  Mathematics Subject GRE Workshop  Mar 2019		<ul> <li>Provost Honors (Muir College, UC San Diego)</li> </ul>	2015 – 2016
Mathematics Club, Sierra College2013 – 2014• Officer• OfficerTECHNICAL SKILLSAndroid, C, C++, ECMAScript, Bash, Git, HTML5/CSS3, Haskell, Java, Javascript, LATEX, MATLAB, Node, NumPy, OpenGL, PHP, Python, R, SAGE, SQL, Unix/LinuxWORKSHOPS AND• Mathematics Subject GRE WorkshopMar 2019			Diego 2016 – 2018
■ 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 ■ Mathematics Subject GRE Workshop Mar 2019			2012 2014
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 Mathematics Subject GRE Workshop Mar 2019			2013 – 2014
SKILLS Node, NumPy, OpenGL, PHP, Python, R, SAGE, SQL, Unix/Linux  WORKSHOPS AND Mathematics Subject GRE Workshop Mar 2019		- Officer	
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		■ Mathematics Subject GRE Workshop	Mar 2019

TALKS GIVEN

	<ul><li>Homotopy and the Hopf Fibration</li><li>Topological Fixed Point Theorems</li></ul>	Jun 2018 Mar 2018
	<ul> <li>Homology and The Snake Lemma</li> <li>Algebraic Geometry: A Historical Primer</li> <li>Introduction to Functional Programming</li> <li>Intermediate LaTeX</li> <li>Introduction to LaTeX</li> <li>Intermediate LaTeX</li> <li>Organizing Research Projects with LaTeX</li> <li>Category Theory as an Organizational Tool</li> </ul>	Nov 2017 Oct 2017 Oct 2017 May 2017 Apr 2017 Feb 2017 Jan 2017 Jan 2017
	<ul> <li>Introduction to LaTeX</li> <li>Introduction to Category Theory, Part 2</li> <li>Introduction to Category Theory, Part 1</li> <li>Haskell for Mathematicians</li> <li>Discrete Mathematics: An Overview of Graphs and Trees</li> </ul>	Nov 2016 Nov 2016 Oct 2016 Oct 2016 May 2014
COURSEWORK	<ul> <li>Graduate Coursework</li> <li>Algebraic Topology</li> <li>Topics in Real Analysis: Quantum Mechanics (Graduate)</li> <li>Functional Analysis</li> <li>Algebra</li> </ul>	Fall 2017 – Spring 2018 Spring 2017 Fall 2016 – Winter 2017 Fall 2017
	<ul> <li>Undergraduate Coursework</li> <li>Cryptography</li> <li>Numerical Methods and Physical Modeling</li> <li>Image Processing</li> </ul>	Winter 2018 Fall 2017 Fall 2017
	<ul> <li>Applied Linear Algebra</li> <li>Partial Differential Equations</li> <li>Computer Vision</li> <li>Complex Analysis</li> <li>History of Mathematics (Hyperbolic Geometry)</li> <li>Theory of Computation</li> <li>Introductory Machine Learning</li> <li>Discrete Math and Graph Theory</li> <li>Design and Analysis of Algorithms</li> </ul>	Summer 2017 Summer 2017 Spring 2017 Spring 2017 Spring 2017 Winter 2017 Winter 2017 Winter 2017 Fall 2016
	<ul> <li>Number Theory</li> <li>Advanced Data Structures</li> <li>Knot Theory</li> <li>Point-Set Topology</li> <li>Mathematical Algorithms and Systems Analysis in Computer Science</li> <li>Probability</li> <li>Software Tools and Techniques</li> <li>Combinatorics</li> <li>Abstract Algebra</li> <li>Real Analysis</li> </ul>	Summer 2016
	<ul> <li>Mathematical Reasoning and Proof</li> <li>Vector Calculus</li> <li>Structure and Interpretation of Signals and Systems</li> <li>Assembly Programming (x86)</li> <li>C++ Programming</li> <li>Finite Mathematics and Linear Programming</li> <li>Discrete Mathematics and Probability Theory</li> <li>Structure and Interpretation of Computer Programs (Python)</li> </ul>	Summer 2015 Summer 2015 Spring 2015 Spring 2015 Spring 2015 Spring 2015 Fall 2014 Fall 2014
	<ul><li>Elementary Statistics</li><li>Introduction to Unix</li></ul>	Summer 2014 Summer 2014

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