

Department of Mathematics, University of California, Los Angeles
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Los Angeles, CA 90095

- EDUCATION** **University of California, Los Angeles**
 Doctor in Philosophy, Mathematics Aug. 2016 – Jun. 2022 (expected)
 - Analysis qualifying exam passed Sept. 2018
 - Geometry and Topology qualifying exam passed Sept. 2017
 - Basic qualifying exam passed Sept. 2016
- Northwestern University**
 Bachelor of Arts in Mathematics with Honors Sept. 2012 – Jun. 2016
 - Magna Cum Laude
 - Major GPA: 3.96 / 4.00
 - Cumulative GPA: 3.87 / 4.00
 - Honors Thesis: *Fredholm Operators and the Family Index*, advised by Ezra Getzler
- PREPRINTS AND PUBLICATIONS** *Morse-Smale Characteristic Foliations and Convexity in Contact Manifolds.* arXiv preprint, 2019.
J. Breen, M. Bueno, S. Ford, and S. Furtado, On the sign characteristic of Hermitian linearizations in $\mathbb{D}\mathbb{L}(P)$. *Linear Algebra and its Applications.* 519 (2017), 73-101.
- CONFERENCES AND WORKSHOPS** *Symplectic Geometry and Homotopy Theory*
 UCLA Dec. 2018
The topology and geometry of low-dimensional manifolds
 University of Texas at Austin Jul. 2018
 Summer Northwestern Analysis Program 2017, *PDE*
 Northwestern University Aug. 2017
J. Breen and S. Ford, Sign Characteristic Preserving Linearizations in $\mathbb{D}\mathbb{L}(P)$
 Young Mathematicians Conference
 The Ohio State University Aug. 2015.
- TALKS** *A Really Hard Integral*
 UCLA GSO Seminar Nov. 2019
Review of Sheaves, Derived Categories, and DG Categories
 UCLA Topology Seminar May 2019
The Busemann-Petty Problem
 UCLA GSO Seminar May 2019
Systolic Geometry and Gromov's Inequality
 UCLA GSO Seminar Mar. 2019
Index Theory and Toeplitz Operators
 UCLA GSO Seminar Apr. 2017
- OTHER RESEARCH EXPERIENCE** **University of California, Santa Barbara**
 Undergraduate Research Student, Mathematics Department Jun. 2015 – Aug. 2015
 - Project: *On sign characteristic preserving linearizations in $\mathbb{D}\mathbb{L}(P)$.*
 - Advisor: Maribel Bueno
 - Research areas: Matrix analysis, indefinite linear algebra, matrix polynomials.

ACADEMIC HONORS & AWARDS	Northwestern University	
	Dean's List	Fall 2012 – Spring 2016
	Outstanding Achievement in Mathematics by a Graduating Senior	May 2016
	Outstanding Contributions to Undergraduate Mathematical Life	May 2016
	Phi Beta Kappa	May 2015
	Outstanding Achievement in Mathematics by a Junior	May 2015
	Outstanding Contributions to Undergraduate Mathematical Life	May 2015
	Excellence as an Undergraduate Teaching Assistant	May 2015
	Outstanding Achievement in Mathematics by a Sophomore	May 2014
Excellence in Mathematics by a Freshman	May 2013	
INSTRUCTOR EXPERIENCE	University of California, Los Angeles	
	Math 31B instructor for the <i>CEED Summer Bridge Program</i>	Summer 2019
TA EXPERIENCE	University of California, Los Angeles	
	Math 31B: Integration and Infinite Series	Fall 2019
	Math 31A: Differential and Integral Calculus	Fall 2019
	Math 31B: Integration and Infinite Series	Spring 2019
	Math 31B: Integration and Infinite Series	Winter 2019
	Math 31B: Integration and Infinite Series	Fall 2018
	Math 115AH: Honors Linear Algebra	Spring 2018
	Math 33A: Linear Algebra and Applications	Spring 2018
	Math 31B: Integration and Infinite Series	Winter 2018
	Math 31AL: Differential and Integral Calculus Laboratory	Fall 2017
	Math 31B: Integration and Infinite Series	Fall 2017
	Math 31B: Integration and Infinite Series	Spring 2017
	Math 31B: Integration and Infinite Series	Winter 2017
	Math 31B: Integration and Infinite Series	Fall 2016
	Northwestern University	
	Math 240-0: Linear Algebra	Spring 2016
	Math 224-0: Integral Calculus of One Variable Functions	Winter 2016
	Math 230-0: Differential Calculus of Multivariable Functions	Fall 2015
	EECS 212-0: Mathematical Foundations of Computer Science	Fall 2015
	Math 230-0: Differential Calculus of Multivariable Functions	Winter 2015
	Math 224-0: Integral Calculus of One Variable Functions	Winter 2015
	Math 224-0: Integral Calculus of One Variable Functions	Fall 2014

OTHER**EXPERIENCE****University of California, Los Angeles**

Independent study project leader for the UCLA Directed Reading Program Spring 2019

Center for Excellence in Engineering and Diversity study night assistant Spring 2018 – present**Northwestern University**

Athletic Tutor, Northwestern Athletic Department Jan. 2015 – Jun. 2016

Undergraduate Mathematics Society Coordinator Mar. 2015 – Jun. 2016*Undergraduate Mathematics Society* Assistant Coordinator Dec. 2014 – Mar. 2015*Math & Mentors* study group leader Sept. 2013 – Sept. 2014**Center for Talent Development**

Teaching Assistant, Summer Program Jun. 2014 – Aug. 2014

Teaching assistant for the following classes of 7th and 8th grade students: *Introduction to Java Programming*, *Web Development with Ruby on Rails*.

Office Assistant, Summer Program Admissions Office Jan. 2013 – Jun. 2016

Lingjie English School, Yueyang, Hunan, China

Summer Instructor Jul. 2013 – Aug. 2013

Primary instructor for four classes of students ages 12-14. Designed a summer curriculum, planned daily lessons, prepared classroom materials, and administered daily instruction.