

Brian de Silva

CONTACT INFORMATION	University of Washington Department of Applied Mathematics 202 Lewis Hall UW Box 353925 Seattle, Washington 98195-3925	bdesilva@uw.edu https://briandesilva.github.io/ https://github.com/briandesilva
RESEARCH INTERESTS	Reduced order modeling, scientific computing, numerical analysis, and data science	
EDUCATION	University of Washington Ph.D. candidate, Applied Mathematics (expected 2019) <ul style="list-style-type: none">• Advisor: Ulrich Hetmaniuk• GPA: 3.92• Advanced Data Science Option M.S. in Applied Mathematics, December 2015 University of California at Los Angeles B.S. in Applied Mathematics, December 2013 <ul style="list-style-type: none">• Specialization in computing	
PUBLICATIONS	<input type="checkbox"/> B. de Silva, R. Compton <i>Prediction of Foreign Box Office Revenues Based on Wikipedia Page Activity</i> , arXiv preprint - arXiv:1405.5924 Curated a dataset of meta data associated with films' Wikipedia pages and attempted to predict box office revenues using linear models such as linear regression, ridge regression, and LASSO. We found that such models performed reasonably well for the domestic box office, but not foreign ones. <input type="checkbox"/> Maria-Grazia Ascenzi, Xia Du, James I. Harding, Emily N. Beylerian, Brian M. de Silva, Ben J. Gross, Hannah K. Kastein, Weiguang Wang, Karen M. Lyons, Hayden Schaeffer, <i>Automated Cell Detection and Morphometry on Growth Plate Images of Mouse Bone</i> , Applied Mathematics, Special issue on Mathematical modeling and experimentation, Vol.5, No.18, 2014.	
TEACHING EXPERIENCE	Summer 2017 Instructor, <i>Introduction to Differential Equations and Applications</i> Spring 2017 TA, <i>Graduate Numerical Analysis of Time Dependent Problems</i> Winter 2017 Instructor, <i>Numerical Linear Algebra and Numerical Analysis</i> Fall 2016 TA, <i>Graduate Vector Calculus and Complex Variables</i> Summer 2016 Instructor, <i>Numerical Linear Algebra and Numerical Analysis</i> Spring 2016 TA, <i>Calculus III</i> Winter 2016 TA, <i>Calculus II</i> Fall 2015 TA, <i>Beginning Scientific Computing</i> Spring 2015 TA, <i>Beginning Scientific Computing</i> Winter 2015 TA, <i>Calculus I</i> Fall 2014 TA, <i>Calculus I</i>	

GRADUATE COURSEWORK	<input type="checkbox"/>	Approximation Theory & Spectral Methods	<input type="checkbox"/>	Data Analysis
	<input type="checkbox"/>	Dynamical Systems	<input type="checkbox"/>	Statistics
	<input type="checkbox"/>	Machine Learning	<input type="checkbox"/>	Numerical Linear Algebra
	<input type="checkbox"/>	Numerical Analysis	<input type="checkbox"/>	Numerical Optimization
	<input type="checkbox"/>	Differential Equations	<input type="checkbox"/>	Functional Analysis
	<input type="checkbox"/>	Numerical Solution of Differential Equations	<input type="checkbox"/>	Finite Volume Methods
	HONORS AND AWARDS	2017	Boeing Award for Excellence in Service	
2015		Joseph Hammack Endowment Award for Outstanding Work in Applied Mathematics		
SCIENTIFIC RESEARCH EXPERIENCE	2013–2014	Information and Systems Sciences Internship. Social and Information Networks, Social modeling, Data collection HRL Laboratories, Malibu, California		
	Summer 2013	Applied Mathematics REU. Social Networks and Large Data Sets, Topic Modeling, Nonnegative Matrix Factorization UCLA, Los Angeles, California		
	Summer 2012	Applied Mathematics REU. Bone Growth Plate Modeling, Image Processing, Spectral Clustering, UCLA, Los Angeles, California		
CODING	C++	Four years, used for numerical methods and scientific computing		
	MATLAB	Six years, used for numerical methods and scientific computing		
	Python	Three years, used for machine learning and numerical methods		
	Mathematica	Two years, used for symbolic calculations and visualization		
EXTRA- CURRICULARS	2017–Present	Member of Applied Math Diversity Committee		
	2015–2018	Principal organizer for the Numerical Analysis Research Club		
	2016–2017	Graduate Student Representative of Applied Math Department		
	2015–2016	Vice President of the UW SIAM student chapter		