

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. student, Applied Mathematics (expected June 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	<table><tr><td>Summer</td><td>2017</td><td>Instructor, Introduction to Differential Equations and Applications</td></tr><tr><td>Spring</td><td>2017</td><td>TA, Graduate Numerical Analysis of Time Dependent Problems</td></tr><tr><td>Winter</td><td>2017</td><td>Instructor, Numerical Linear Algebra and Numerical Analysis</td></tr><tr><td>Fall</td><td>2016</td><td>TA, Graduate Vector Calculus and Complex Variables</td></tr><tr><td>Summer</td><td>2016</td><td>Instructor, Numerical Linear Algebra and Numerical Analysis</td></tr><tr><td>Spring</td><td>2016</td><td>TA, Calculus III</td></tr><tr><td>Winter</td><td>2016</td><td>TA, Calculus II</td></tr><tr><td>Fall</td><td>2015</td><td>TA, Beginning Scientific Computing</td></tr><tr><td>Spring</td><td>2015</td><td>TA, Beginning Scientific Computing</td></tr><tr><td>Winter</td><td>2015</td><td>TA, Calculus I</td></tr><tr><td>Fall</td><td>2014</td><td>TA, Calculus I</td></tr></table>		Summer	2017	Instructor, Introduction to Differential Equations and Applications	Spring	2017	TA, Graduate Numerical Analysis of Time Dependent Problems	Winter	2017	Instructor, Numerical Linear Algebra and Numerical Analysis	Fall	2016	TA, Graduate Vector Calculus and Complex Variables	Summer	2016	Instructor, Numerical Linear Algebra and Numerical Analysis	Spring	2016	TA, Calculus III	Winter	2016	TA, Calculus II	Fall	2015	TA, Beginning Scientific Computing	Spring	2015	TA, Beginning Scientific Computing	Winter	2015	TA, Calculus I	Fall	2014	TA, Calculus I
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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 Teaching		
	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	Five years, used for numerical methods and scientific computing		
	Python	Two years, used for machine learning and numerical methods		
	Mathematica	Two years, used for symbolic calculations and visualization		
EXTRA– CURRICULARS	2016–2017	Graduate Student Representative of Applied Math Department		
	2015–2016	Principal organizer for the Numerical Analysis Research Club		
	2015–2016	Vice President of the UW SIAM student chapter		