

# THUNWA THEERAKARN

Department of Mathematics, University of California Berkeley, Berkeley, CA  
thunwa@math.berkeley.edu ◦ <http://math.berkeley.edu/~thunwa>

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EDUCATION	<b>University of California Berkeley</b> , Berkeley, CA ◊ PhD (Mathematics) ◊ Thesis in preparation: <i>Locally collapsed 4-manifolds with respect to a lower sectional curvature bound</i> . Advisor: Prof. John Lott.	expected: May 2018
	<b>Brown University</b> , Providence, RI ◊ Sc.M (Applied Mathematics) ◊ Sc.B (with honors in Mathematics, Magna Cum Laude, and junior Phi Beta Kappa)	May 2012
PUBLICATIONS	◊ B. Sandstede and T. Theerakarn. Regularity of Center Manifolds via the Graph Transform. <i>Journal of Dynamics and Differential Equations</i> , 27:989-1006, 2015.	
TEACHING EXPERIENCES	<b>Awards</b> ◊ Teaching Effectiveness Award for GSIs (May 2014) ◊ Outstanding Graduate Student Instructor Award (May 2014) <b>Instructor</b> ◊ Math 32: Precalculus (Spring 2018) ◊ Math 53: Multivariable Calculus (Summer 2013) <b>Graduate Student Instructor (Teaching Assistant)</b> ◊ Math 104: Introduction to Analysis (Fall 2016) ◊ Math 54: Linear Algebra and Differential Equations (Fall 2014) ◊ Math 53: Multivariable Calculus (Spring 2013, Fall 2013, Spring 2014, Fall 2015) ◊ Math 1A: Calculus (Fall 2012) <b>Undergraduate Teaching Assistant</b> ◊ Intermediate Multivariable Calculus (2011) ◊ First-Year Seminar: Exploring the Fourth Dimension (2011) <b>Undergraduate Tutor and Grader</b> ◊ Tutor : Intermediate Multivariable Calculus (2009) ◊ Grader : Analysis: Functions of several-variable (2010), Analysis: Functions of one-variable (2010), Honor multivariable calculus (2009)	
OUTREACHES AND SERVICES	◊ Created and moderate a mathematics education Facebook page aimed at the Thai general public. Have 3300 followers. ( <a href="http://www.facebook.com/mfnd1">http://www.facebook.com/mfnd1</a> ) ◊ Exhibitor at the Julia Robinson Mathematics Festival at Pixar Inc., Emeryville, CA ◊ Volunteer exhibitor for the Museum of Mathematics at the Bay Area Science Festival, AT&T Park, San Francisco, CA ◊ Academic Technology Steering Committee for Brown University	since 2014 2014 2013 2011-2012
EXPERIENCES	<b>iOS developer</b> ◊ Designed and developed StatsMate, an easy-to-use statistics calculator for iOS devices. Basic functionalities include probability distributions, hypothesis testings, and basic data analysis. ( <a href="http://www.statsmate.com">www.statsmate.com</a> ) <b>Interactive Calculus Textbook with Mathematica</b> ◊ Worked with Prof. Thomas Banchoff to create interactive Mathematica visualizations to accompany his upcoming calculus textbook.	since 2010 2011

**Beyond the Third Dimension, Interactive Version** 2009  
 ◇ Developed an online version with 3-dimensional interactive graphics of *Beyond the Third Dimension* for Prof. Thomas Banchoff, the author.

**SEALNet Project Thailand 2009** 2009  
 ◇ Active Learning (Mathematics) co-leader  
 ◇ Collaborated with teachers to design and teach active learning curricula for junior high school students in Tasaban 5 School, Lampang, Thailand

ACADEMIC HONORS ◇ David Howell Premium for Excellence in Mathematics and Natural Philosophy May 2012  
 ◇ First Place in Henry Parker Manning Mathematics Prize Spring 2011

PRESENTATIONS ◇ Differential Geometry Seminar, UC Berkeley Oct 2017  
*Locally volume collapsed 4-manifolds with respect to a lower sectional curvature bound*  
 ◇ Student Differential Geometry Seminar, UC Berkeley Apr 2017  
*Collapsing Riemannian Manifolds While Keeping Their Curvature Bounded II*  
*Locally Collapsed 3-Manifolds* 2016  
 ◇ Graduate Student Seminar, Mathematical Science Research Institute, Berkeley, CA 2016  
*Topics in Cheeger-Colding-Naber Theory*  
 ◇ Student Geometry and Topology Seminar, UC Berkeley 2015  
*Spaces of Curvature Bounded Below* 2014  
*Sphere theorems for Alexandrov Spaces*  
 ◇ MAA Undergraduate Student Poster Session, Joint Mathematics Meeting, Boston, MA 2012  
*Centers of Magnitude. (Outstanding Presentation Award)*  
 ◇ Summer Research Symposium, Brown University, Providence, RI 2012  
*Regularity of Center Manifolds via the Graph Transform*  
 ◇ Young Mathematician Conference, Ohio State University, OH 2012  
*Centers of Magnitude*  
 ◇ Special Seminar, Clavius Symposium, Boston College, MA 2011  
*Centers of Magnitude*  
 ◇ International Student Sciences Fair, Busan, Korea 2007  
*Pascal's Simplex*

LANGUAGES Mathematica, Python, Matlab, Objective-C