Huy Dinh

CONTACT INFORMATION

Huy Dinh
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EDUCATION

Ph.D., Applied Mathematics, University of Utah — **Expected May 2020**

Advisor: Professor Kenneth M. Golden

Research Topics: simulations of floe scale dynamics, anomalous diffusion in sea ice, fractional diffusion equations, numerical methods for nonlocal PDEs

M.S., Statistics, University of Utah — **Expected August 2019**

Advisor: Professor Tom Alberts

Research Topics: fractional Brownian motion (fBM) and autoregressive integrated moving average (fARIMA), continuous time random walks (CTRWs), Hurst exponent estimation

B.S., Mathematics, University of Houston — **May 2014**

Minor: Physics

Research Topics: mathematical image processsing, applied algebraic topology, inverse problems, machine learning methods

EMPLOYMENT

Graduate Research and Teaching Assistant, University of Utah	**August 2014–current**
Undergradaute Research Assistant, University of Houston	**Spring 2010–May 2014**

HONORS AND AWARDS

NSF Graduate Research Fellowship Program Honorable Mention	**2016**
Travel Award to attend Joint Mathematics Meetings	**2016**
Travel Award to attend PIMS Conference on the Mathematics of Sea Ice	**2015**
NSF Graduate Research Fellowship Program Honorable Mention	**2015**
Provost's Undergraduate Research Scholarship	**2013**

SUBMITTED PUBLICATIONS

H. Dinh, H. Antil, Y. Chen, E. Cherkaev and A. Narayan. "Model reduction for fractional elliptic problems using Kato's formula." *IMA Journal of Numerical Analysis* (2019)

H. Dinh, D. Jimenez, M. Papadakis, F. Laezza, D. Labate. "Automated quantitative analysis of confocal images of neuronal network cultures." *The 2013 International Symposium on Biomedical Imaging: From Nano to Macro, San Franciso, CA, USA, 8-11, 2013* (2013)

ATTENDED CONFERENCES

Second SIAM Wasatch Student Chapters Conference	**April 2019**
Joint Mathematics Meeting	**January 2016**
MRC on Differential Equations, Probability and Sea Ice	**June 2015**
PIMS Conference on the Mathematics of Sea Ice	**September 2015**
37th Annual Texas PDE Conference	**March 2014**
Society for Neuroscience Annual Meeting	**October 2012**

PRESENTATIONS	"Anomalous Diffusion in Sea Ice" *SIAM Wasatch Student Chapters Conference, Utah State University*	**April 2019**
	"Eigenfaces, a Perspective on a Machine's Perspective" *Applied Math Collective, University of Utah*	**April 2019**
	"Anomalous Diffusion in Sea Ice" *Oral Qualifying Exam, University of Utah*	**Feburary 2019**
	"Factorization of Functions" *Applied Math Collective, University of Utah*	**July 2018**
	"Fractional Brownian Motion: Formulation and Applications" *Applied Math Collective, University of Utah*	**Feburary 2018**
	"Diffusion on Fractals" *Graduate Student Colloquium, University of Utah*	**Feburary 2016**
	"Vibration Suppression in Coupled Spring and Mass System" (poster) *37th Annual Texas PDE Conference, University of North Texas*	**March 2014**
	"Vibration Suppression in Coupled Spring and Mass System" (poster) *Undergradaute Research Day, University of Houston*	**October 2013**
	"Automated quantitative image analysis of voltage-gated Na+ channels at the AIS" (poster) *Society for Neuroscience Annual Meeting*	**October 2012**
	"Soma Detection and Persistent Homology" (poster) *Spring Academic Showcase, University of Houston*	**April 2013**
	"Self-Assembled Nano-Patterns by Off-nNrmal Gas Cluster Ion Beam Bombardment for Biological Applications" (poster) *Undergraduate Research Day, University of Houston*	**October 2012**

MENTORING	**Graduate students**	
	Rebecca Hardenbrook	**Fall 2018–Spring 2019**
	Sean Groathouse	**Fall 2018–Spring 2019**
	Undergraduate students	
	Jacqueline Rich (co-advised with Kenneth M. Golden)	**Fall 2018**
	Everest Fang (co-advised with Kenneth M. Golden)	**Summer 2015**

PROFESSIONAL SERVICES AND OUTREACH	**University of Utah SIAM Student Chapter President**	**Fall 2014–Summer 2018**
	organized the First SIAM Wasatch Student Chapters Conference *University of Utah*	**April 2018**
	organzied SIAM SC Interdepartmental BBQ *University of Utah*	**June 2018**
	organzied UoU and Westminister COMAP Solutions Presentation *University of Utah*	**Feburary 2016**
	organzied UU Graduate Alumni Panel *University of Utah*	**October 2015**
	Outreach and Volunteering	
	ACCESS panel member *ACCESS program, University of Utah*	**Summer 2018**
	Math Demonstrations Table *Red, White and U Day, University of Utah*	**Summer 2018**
	Superconducting Cable Demonstration *Physics Outreach, Harmony School of Technology- Houston*	**December 2011**

Physics Demonstrations	
Physics Outreach, Quail Valley Middle School	**May 2011**
Boat Attendant	
UH Cardboard Boat Regatta, University of Houston	**April 2011**

COMPUTER SKILLS   Experience with LaTeX, MatLab, Mathematica, HTML, Python, Git, C++, Java, Windows, Linux.

TEACHING
EXPERIENCE

Lecturer, University of Utah

Math 3070, Applied Statistics I	**Fall 2019**
Math 3150, Partial Differential Equation for Engineers	**Summer 2019**
Math 1070, Introduction to Statistical Inference	**Spring 2019**
Math 1070, Introduction to Statistical Inference	**Fall 2018**
Math 3160, Applied Complex Variables	**Summer 2018**
Math 2250, Differential Equation and Linear Algebra (lab)	**Spring 2018**
Math 1090, Business Algebra	**Fall 2017**
Math 3160, Applied Complex Variables	**Summer 2017**
Math 1060, Trigonometry	**Spring 2017**
Math 1090, Business Algebra	**Fall 2016**
Math 1090, Business Algebra	**Spring 2016**

Invited Lectures, University of Utah

Vector Calculus and PDEs, one lecture	**Summer 2018**
Math 2210 Calculus III , two lectures	**Spring 2018**
Math 5750/6880, Mathematics and Climate, one lecture	**Fall 2017**
Math 1060, Trigonometry, one lecture	**Spring 2017**
Math 2210, Calculus III, one lecture	**Fall 2015**

Lab/Teaching Assistant, University of Utah

Math 2250, Differential Equation and Linear Algebra, Lab	**Spring 2018**
Math 2210, Calculus III, TA	**Fall 2015**
Math 2250, Differential Equation and Linear Algebra, Lab	**Fall 2014**

FEATURED ARTICLES   UH Putnam Team Ranked 87th out of 578 Teams from U.S./Canadian Institutions