

# Vinh Dang

## Curriculum Vitae

### Education

- 08/2011–12/2015 **Ph.D. in Mathematics**, *Brigham Young University*, Provo.
- 01/2010–08/2011 **M.S. in Mathematics**, *Brigham Young University*, Provo.
- 01/2007–08/2008 **B.S. in Mathematics**, *Brigham Young University*, Provo.  
Magna Cum Laude
- 06/2005–12/2006 **General Education Study**, *Lone Star College System - North Harris*, Houston.

### Experience

#### Teaching Experience

- 08/2015–Present **Associate Professor**, LONE STAR COLLEGE - NORTH HARRIS, Houston.  
Plan, develop and provide high-quality instruction for a variety of courses from developmental mathematics to college level mathematics:
- College Algebra (multiple sections per semester) - Fall 2015, Spring 2016, Fall 2016, Spring 2017.
  - Pre-Algebra and Online Intermediate Algebra - Fall 2015.
  - Precalculus (multiple sections per semester) - Spring 2016, Fall 2016.
  - Calculus I - Summer 2016, Fall 2016 (Both online and face-to-face), Spring 2017 (Honors section), Summer 2017.
  - Calculus II - Spring 2017 (Online).
  - Linear Algebra - Summer 2016.
  - Mathematics for Business - Summer 2017.
- 06/2012–07/2015 **Instructor**, BRIGHAM YOUNG UNIVERSITY, Provo.  
Effectively prepare, teach, and assess student learning for the following courses:
- Trigonometry - Summer 2012.
  - Essentials of Calculus for Business - Fall 2012.
  - Calculus I - Summer 2013 and Fall 2014.
  - Calculus II - Fall 2013 and Winter 2015.
  - Calculus of Several Variables - Summer 2014 and Summer 2015.
- 01/2010–05/2012 **Teaching Assistant**, BRIGHAM YOUNG UNIVERSITY, Provo.  
Teach recitation sessions, grade and provide detailed feedback on students' homework and exams, hold multiple office hours to accommodate students' varied schedules, work effectively with students in groups, one-on-one and online settings.
- Main TA in charge of an online independent study course on Differential Equations from August 2010 to August 2011.
  - Co-author the electronic textbook used for the course Essentials of Calculus for Business at BYU.
  - TA for Calculus I-III, Linear Algebra, Engineering Math and Number Theory.
- 08/2009–12/2009 **Teaching Assistant**, UNIVERSITY OF SOUTHERN CALIFORNIA, Los Angeles.  
Teach recitation sessions, hold office hours, grade homework and exams for a total of 20 hours per week for Linear Algebra.

- 08/2008–06/2009 **Teaching Assistant**, UNIVERSITY OF TENNESSEE, Knoxville.  
Teach recitation sessions, hold office hours, grade homework and exams for a total of 20 hours per week in Spring 2009 for Calculus for Business. Grade homework 20 hours per week in Fall 2008 for Honors Calculus II and 4 sections of Differential Equations.
- 01/2007–08/2008 **Teaching Assistant and Grader**, BRIGHAM YOUNG UNIVERSITY, Provo.
- Work with students individually and in groups in the BYU math lab. Provide assistance in a wide range of courses such as College Algebra, Trigonometry, Finite Mathematics, Calculus, Differential Equations and Linear Algebra:
    - Explain and clarify important concepts to strengthen students' understanding of the course material.
    - Work through key examples and representative homework problems with the students to help them develop problem solving skills.
  - Teach small review sessions to prepare Calculus students for their midterm and final exams.
  - Grade homework for upper division math courses such as Real Analysis and Complex Analysis.
- 08/2005–12/2006 **Mathematics Tutor**, NORTH HARRIS COLLEGE, Houston.  
Tutor students up to 20 hours per week in the NHC math lab in courses ranging from developmental math such as Pre-Algebra and Introductory Algebra through college level math such as College Algebra, Pre-Calculus and Calculus.
- Provide one-on-one tutoring for students with diverse backgrounds using a combination of tutoring techniques such as active probing, role reversal, giving plenty of examples, relating the material to the student's everyday life, and encouraging questions.
  - Participate in regular tutor training sessions to learn from experienced instructors.

## Research Experience

- 05/2012–07/2015 **Research Assistant**, BRIGHAM YOUNG UNIVERSITY, Provo.  
Research in Geometry/Topology with Professor Jessica Purcell. This research resulted in my doctoral dissertation.
- 02/2014–05/2014 **Visiting Research Student**, UNIVERSITY OF MELBOURNE, Australia.  
Do research with my advisor, attend regular seminars organized by the math department, discuss my projects with other graduate students and visitors there.
- 01/2010–08/2011 **Research Assistant**, BRIGHAM YOUNG UNIVERSITY, Provo.  
Research in number theory with Professor Darrin Doud. This research resulted in my master's thesis.
- 06/2007–08/2007 **Research Experience for Undergraduates**, BRIGHAM YOUNG UNIVERSITY, Provo.  
Research in mathematical finance. Published a paper.

## Service and Student Advising

Co-organize the Lone Star College - North Harris *Changing Mindsets* Math Summit, Houston, April 2016.

Faculty advisor for Aftermath, LSC - North Harris math club, develop students' problem solving skills and train them for the AMATYC Student Math League. Invite speakers in STEM fields to present at the math club.

Advise Honors students' projects in seminar-style courses. Work with the director of the Honors College to provide suggestions and feedback for the STEM Honors courses and seminars. Develop and currently teach the first curriculum-based Honors Calculus I course at LSC-North Harris.

Committee Work:

- Math 0306, 0308, 0310 Challenge Exam Committee.
- Math 2412 Textbook Selection and Course Document Update Committee.
- Math 1314 Core Topics and Course Document Update Committee.

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## Conferences Attended

- 2016/2017 **STEM Pathways Symposium**, CHARLES A. DANA CENTER, Austin.
- 05/2016 **HETI Great Teaching Seminar**, LONE STAR COLLEGE, Kemah.
- 08/2015 **HETI Fall Conference - Development of Teaching Skills**, LONE STAR COLLEGE - SYSTEM OFFICE, Houston.
- 12/2014 **Tech Topology Conference**, GEORGIA INSTITUTE OF TECHNOLOGY, Atlanta.
- 11/2014 **Texas Geometry and Topology Conference**, UNIVERSITY OF TEXAS, Austin.
- 10/2014 **The Ahlfors-Bers Colloquium**, YALE UNIVERSITY, New Haven.
- 08/2014 **The Thin Manifold Conference**, UNIVERSITY OF IOWA, Iowa City.  
Presented my research in Geometry/Topology.
- 03/2013 **Student Research Conference**, BRIGHAM YOUNG UNIVERSITY, Provo.  
Presented my research in Geometry/Topology.
- 07/2012 **PCMI Summer Session**, PARK CITY MATHEMATICS INSTITUTE, Park City.
- 04/2011 **MAA Intermountain Section Meeting**, SOUTHERN UTAH UNIVERSITY, Cedar City.  
Presented my research in number theory.
- 12/2010 **Western Number Theory Conference**, UTAH VALLEY UNIVERSITY, Orem.  
Presented my research in number theory.
- 03/2010 **Student Research Conference**, BRIGHAM YOUNG UNIVERSITY, Provo.  
Presented my research in number theory.
- 04/2006 **Student Conference for Research and Creative Arts**, UNIVERSITY OF HOUSTON - CLEAR LAKE, Houston.  
Presented my calculus honors project on the Basel problem and the history of the Riemann Zeta function.

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## Publications and Awards

Co-author with Scott Glasgow, Harrison Potter and Stephen Taylor "Pricing The Asian Call Option," The Electronic Proceedings of Undergraduate Mathematics Day, University of Dayton 3 no. 3 (2008).

Academic Achievement Awards:

- Multiple Graduate Teaching and Research Assistantships and Fellowships from BYU, USC and UTK.
- Undergraduate Tuition Scholarships and Dean's Honors List from BYU.
- Multiple Awards and Recognition of Achievement from NHC Math Department.
- Top scores in BYU undergraduate math competitions and the Southwest AMATYC Student Mathematics League.

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## Computer Skills

Proficient in Microsoft Word, Excel and PowerPoint, Maple, Mathematica, HTML,  $\text{\LaTeX}$ , WebAssign, WeBWork, MyMathLab, WebEx.

Familiar with Java, MATLAB, GeoGebra, Adobe Illustrator.

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## References

### **Tosha Barclay**

Interim Vice President of Instruction  
Lone Star College - North Harris

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Houston, TX 77073

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### **Jessica Purcell - My Ph.D. Advisor**

Professor of Mathematics

Monash University

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Room 416

VIC 3800, Australia

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### **Ellen Turnell**

Interim Dean - Math and Science

Lone Star College - North Harris

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### **Darrin Doud - Masters Thesis Advisor**

Professor of Mathematics

Brigham Young University

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