Curriculum Vitae

Ashok Aryal Department of Mathematics Kansas State University 138 Cardwell Hall Manhattan, KS 66506 Tel.: (785) - 317 – 4563 E-mail: aaryal@ksu.edu https://www.math.ksu.edu/~aaryal/

Education:

- Ph.D. in Mathematics July 2017 (Expected) Kansas State University. Advisor: Ivan Blank
- MS in Mathematics 2015, Kansas State University.
- Master in Mathematics 2005, Tribhuvan University, Nepal.
- Graduate Certificate in Applied Mathematics 2016, Kansas State University.
- BS in Mathematics and Economics 2002, Tribhuvan University, Nepal.

<u>Research Interests</u>: Partial Differential Equation, Free Boundary Problems, Harmonic Analysis, and Applied Mathematics.

Publications:

- Geometry of Mean Value Sets for General Divergence form Uniformly Elliptic Operators (Joint with Ivan Blank) Submitted.
- Bernoulli type Free Boundary Problem and The Mean Value Theorem for Divergence form Elliptic Operators, 64-page preprint. Joint work with Ivan Blank.

Teaching Experience:

- Master Graduate Teaching Assistant (2015 Present), Department of Mathematics, Kansas State University.
- Organizational Graduate Teaching Assistant (2014 2015), Department of Mathematics, Kansas State University.
- Graduate Teaching Assistant (2012 2014), Department of Mathematics, Kansas State University.

- Lecturer (2007 2012), HIMS College, Kathmandu, Nepal.
- Teacher (2005 2012), Sri Sathya Sai Shiksha Sadan, (An English Medium High School) Kathmandu, Nepal.

Courses Taught:

Course Coordinator:

- Analytical Geometry and Calculus III- Summer 2015, KSU
- Plane Trigonometry Summer 2014, KSU
- Differential Equation, Differential Calculus and Integral Calculus 2007 to 2012, HIMS
- Business Calculus, Probability, Statistics and Financial Mathematics 2007 to 2012, HIMS
- High School Mathematics 2005 to 2012, Sri Satya Sai Shiksha Sadan.

Primary Instructor:

- General Calculus and Linear Algebra Fall 2014, Kansas State University
- Elementary Differential Equation Summer 2016, Kansas State University

Recitation Instructor:

- Analytical Geometry and Calculus I Fall 2012, Spring 2013, Fall 2013, Fall 2015, Spring 2016, Spring 2017 KSU.
- Analytical Geometry and Calculus II Spring 2017, KSU
- Analytical Geometry and Calculus III Spring 2015, KSU
- Plane Trigonometry Spring 2014, KSU
- Elementary Differential Equations Fall 2016, KSU

Awards, Honors and Scholarships:

• Recipient of the Stamey Award for Undergraduate Teaching and Advising 2016, College of Arts and Sciences, Kansas State University. (This award is the top award in the college for teaching and advising.)

- Nominated by the Department of Mathematics for the Presidential Award for Excellence in Undergraduate Teaching 2016, Kansas State University.
- Nominated by the Department of Mathematics and the College of Arts and Sciences for GSC Award for Graduate Student Teaching Excellence 2016 2017, Kansas State University.
- Recipient of Karl Stromberg Outstanding Teaching Award 2015, Department of Mathematics, Kansas State University.
- Organizational GTA in 2014 and Master GTA in 2015- 2016 (both based on excellence in teaching undergraduate mathematics) Department of Mathematics, Kansas State University.
- Received arts and sciences research travel scholarship award 2016, College of Arts and Sciences, Kansas State University.
- Received Summer Graduate workshops June 13 24, 2016 at Mathematical Sciences Research Institute (MSRI) in Berkeley, California.
- Received an Award for travel support to the Joint Mathematics Meetings 2017 by American Mathematical Society.
- Received travel support for the Joint Mathematics Meetings 2017 by Department of Mathematics, Kansas State University.

Presentations:

- Free boundary problem and a generalization of the Mean Value Theorem for arbitrary divergence form uniformly elliptic operators. Analysis Seminar. March, 2017, KSU.
- Mean Value Theorem on Generalized Spheres for divergence form elliptic operators. MMA General Contributed Paper Session on Analysis JMM. January, 2017, Atlanta.
- Generalized Mean Value Sets for divergence form elliptic operators. AMS Contributed Paper Session on Partial Differential Equation, JMM. January, 2017, Atlanta.
- The Mean Value Theorem for general divergence from elliptic operators. Analysis Seminar. April, 2016, KSU.
- Obstacle Problems, Free Boundary Problems, and Mean Value Theorems, Graduate Student Seminar. March 8, and March 29, 2016, KSU.
- Joint presentation with Adelina Kaye on an application of Python program for undergraduate teaching in the Final Project, Scientific Computation with Python, Aug 3, 2015, KSU.

- Integration of Human Values Education in Mathematics, November, 2011, Sathya Sai Shiksha Sadan, Kathmandu, Nepal.
- Importance of integration of human values in Mathematics. January, 2011, Tilingatar Higher Secondary School, Kathmandu, Nepal.

Seminars/ workshop/Training attended:

- Joint Math Meeting, January 04 07, 2017, Atlanta, Georgia.
- Prairie Analysis Seminar, September 16 17, 2016, University of Kansas, Lawrence.
- A two-week summer workshop on Harmonic Analysis and Elliptic Equations on real Euclidean Spaces and on Rough Sets, at MSRI California Berkeley from 6/13/2016 to 6/24/2016.
- Weekly Analysis Seminars at the Department of Mathematics, KSU
- Weekly Graduate Students Seminar at the Department of Mathematics, KSU.
- Prairie Analysis Seminar, September 25 26, 2015, Kansas State University
- A one-day training on Teacher's Development Program, Organized by, Nelson Thornes UK and Cambridge Press India on 31st February 2011, Kathmandu, Nepal.
- A two days' workshop on Education in Human Values, June 4 5, 2005, GEMS School, Kathmandu Nepal.

Professional Development:

- Graduate Student panel for prospective graduate students 2016, Department of Mathematics, KSU
- Assistant coordinator Math Kangaroo Competition 2016, Department of Mathematics, KSU.
- Member of the screening committee for a tenure track assistant Professor in Number theory, 2015-2016, Department of Mathematics, KSU
- Member in American Mathematical Society, 2016 to present.
- Math department's Help Session Coordinator and Speakers program videographer, 2015 to present, Department of Mathematics, KSU.
- Back up videographer, Open house and Posters, 2014 to 2015, Department of Mathematics, KSU.

- Vice President in Nepalese Students Association, 2013 2014, Kansas State University.
- Member in Epsilon Delta Committee, 2004 2005, Tribhuvan University, Nepal.
- Marketing Manager, 2001-2002, Elan International Manpower Company, Kathmandu, Nepal.

Technology Experience:

MATLAB, Python, LaTex, Microsoft Office.

References:

1. Ivan Blank, PhD Advisor and Professor at Department of mathematics KSU.

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2. Andrew Bennett, Department Head, Department of mathematics KSU.

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- Thomas Muenzenberger, Undergraduate Director, Department of mathematics KSU.
 Email: muenz@math.ksu.edu
 Phone: 785-532-0557
- 4. Virginia Naibo, Professor at Department of mathematics, KSU.
 Email: vnaibo@math.ksu.edu
 Phone: 785-532-0554
- Sarah Reznikoff, Director of Graduate Studies, Department of mathematics KSU. Email: sarahrez@math.ksu.edu Phone: 785-532-0575