

Randall R. Van Why Jr.

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Education

Northwestern University

PhD. Mathematics

Evanston, IL

Sep. 2017 – Present

University of Chicago

MSc. in Physical Science; Thesis: The Ricci Flow on Surfaces

Chicago, IL

Sep. 2016 – June 2017

New Mexico Institute of Mining and Technology (NMT)

BSc. in Mathematics with minor in Computer Science; Summa cum laude

Socorro, NM

Aug. 2012 – May 2016

Research

Interests: Symplectic Geometry, Geometric Analysis, Geometric Topology

NMT Computer Science Department

Undergraduate Researcher

Socorro, NM

August 2014 – May 2015

Researched into the applications of sentiment analysis to the development of new metrics for testing app developer reliability
Presented the findings and results via the Collaborative Research Experience for Undergraduates (CREU) Program

Teaching/Professional Experience

University of Chicago

Graduate mentor

Chicago, IL

June – July (2016,2017,2018)

Mentored undergraduate students during the UChicago Mathematics REU
Attended weekly meetings and refereed final papers
Topics include: Stone-Weirstrauss Theorem, Brouwer's fixed-point theorem, and introductory percolation theory, Morse Theory, Differential Topology, and Homotopy Type Theory.

Northwestern University

Teaching Assistant

Evanston, IL

September 2017 – June 2018

Proctored and graded exams for Multivariable Calculus, Single Variable Integral Calculus, and Multivariable Differential Calculus

NMT Mathematics Department

Grader

Socorro, NM

August 2015 – December 2015

Graded for the Basic Concepts of Real Analysis class at New Mexico Tech

NMT Mathematics Department

Student Lecturer

Socorro, NM

August 2015 – December 2015

Prepared and gave lectures on Differential Topology
Wrote and published lecture notes
Studied Steve Smale's proof of the h-cobordism theorem for purposes of an independent study

IRIS/PASSCAL Instrument Center

Software Engineer / Computer Lab Technician

Socorro, NM

September 2012 – March 2015

Wrote software that aided in the interpretation and processing of seismological sensor data
Maintained and repaired field laptops used in seismological experiments used around the globe through the IRIS Consortium

NMT Computer Science Department

Teaching Assistant, Tutor, and Grader

Socorro, NM

January 2013 – May 2014

Lectured for the Introduction to Programming Laboratory
Helped individual students struggling with the class
Met one one one with the students for grading

Conferences and Seminars

Mathematical

Graduate Student Topology/Geometry Conference

University of Illinois at Chicago

Chicago, IL

April 2018

Geometric Analysis Day 2018

University of Chicago

Chicago, IL

March 2018

Southern California Geometric Analysis Seminar

University of California Irvine

Irvine, CA

January 2018

2017 Midwest Geometry Conference

Kansas State University

Manhattan, KS

November 2017

Summer Northwestern Analysis Program (SNAP)

Northwestern University

Evanston, IL

June-July 2017

Thematic Program on Kähler Geometry

University of Notre Dame

Notre Dame, IN

June 2017

UChicago Geometric Analysis Learning Seminar

University of Chicago

Chicago, IL

October 2016

University of Chicago Geometry and Topology Summer School

University of Chicago

Chicago, IL

August 2016

University of Chicago REU

University of Chicago

Chicago, IL

June 2015

AMS Sectional Meeting

University of New Mexico

Albuquerque, NM

April 2014

Non-Mathematical

UC Sacnas

University of Chicago

Chicago, IL

May 2017

HENAAC Conference

Poster presenter

Pasadena, CA

October 2015

Tapia Conference

Poster presenter

Boston, MA

February 2015

HENAAC Conference

Scholarship recipient

New Orleans, LA

October 2014

HENAAC Conference

Scholarship recipient

New Orleans, LA

October 2013

CSAW CTF

New York University

New Orleans, LA

November 2012

HENAAC Conference

Scholarship recipient

Orlando, FL

October 2012

Honors and Awards

Graduate:

Northwestern University Fellowship

HSF Graduate Scholar

Undergraduate:

New Mexico Tech Deans List (2012 - 2016)

NAVSEA/SPAWAR Scholarship (2012 and 2013)

Lockheed Martin Scholarship (2014-2015)

Mills Family Scholarship (2013-2016)

Maurice Greenberg Scholarship (2015-2016)