

Yan Lyansky

Education

1989 - 2002 TEMPLE UNIVERSITY Philadelphia, PA

B.S. received Mathematics, Honors Program 1993

Ph.D. received 1/02 (Thesis: Phase transition for the hard-core stochastic Ising model)

- Graduate GPA: 3.80
- Winner of the Francis James Sholomskas Memorial Award in Mathematics
- Winner of the Honors Teaching Fellowship

Related Courses of Study:

Differential Geometry

Stochastic Processes

Topology

Distributed Operating Systems

Combinatorics

Operations Research

Real Analysis

Quantum Mechanics

Probability Theory

Mathematical Physics

Number Theory

Numerical Analysis

Applied Mathematics

Abstract Algebra

Statistical Mechanics

Branching Processes

Modular Forms

Complex Analysis

Java

Maple

Research

Research Topics Include:

Probability Theory: Entropy, Ergodicity, FKG inequality

Mathematical Physics: Ising model, stochastic Ising model, branching processes

Finance: Black and Scholes model, and Ito calculus (derived the B & S model)

Chaos Theory: Hausdorff dimension of Fractals

Quantum Computing: Quantum Information and Algorithms

Random Walks: Loop erased walks, self avoiding walks

Recurrence Functions MMA Temple University, Philadelphia, PA. (1993)

Binary Quadratic Forms Graduate Student Seminar Temple University, Philadelphia, PA. (1995)

Law of Iterated Logarithm Probability Seminar Temple University, Philadelphia, PA. (1995)

Loop Erased Walks Probability Seminar Temple University, Philadelphia, PA. (1996)

Ising model an Introduction Candidates Seminar Temple University, Philadelphia, PA. (1999)

Stochastic Ising model Candidates Seminar Temple University, Philadelphia, PA. (1999)

Hard-core Stochastic Ising model Thesis Defense Temple University, Philadelphia, PA. (2001)

Intro to JavaScript Undergraduate Seminar, Villanova, PA (2002)

Random Walks on Fractals Undergraduate Seminar, UVI, VI (2003)

Creating a Web Based Startup Undergraduate Seminar, Furman University, NC (2004)

Random Walks Undergraduate Seminar, Coker College, (2006)

3D Objects Generated by Circles Undergraduate Seminar, College of the Bahamas, (2010)

Modeling Violent Crime in the Bahamas Violence Symposium, College of the Bahamas, (2011)

Complete Classification of Regular Tessellations in Space, Brevard College (2016)

Selected Talks

(Total number of talks is over 40)

Related Courses Taught:

Professional experience

Statistics (10 times)
times)

College Math I & II (2 versions) (approx 12

Introductory Logic (4 times)

Graduate & undergraduate Discrete Math

Algebra (over 20 times)

History of Math (once)

Calculus I & II & III (6 times)

Analysis (4 times)

PreCalculus (approx 18 times)

Java (approx 7 times)

Oracle PL/SQL (2 times)

HTML (3 times)

Software Engineering (3 times)

Advanced Calculus (3 times)

Linear Algebra (4 times)

Group Theory I (3 times) and II (2 times)

Operations Research (once)

Arithmetic (approx.10 times)

Spring 2020

Early College at Guilford, Greensboro, NC

High School Math Teacher

- Taught BC Calculus & Statistics
- Developed a student paper on modeling Covid-19 for Guilford County

Fall 2019

Coastal Carolina University, Conway, SC

Visiting Assistant Professor

- Taught Calculus & Algebra
- Ran over 20 study sessions for students outside of class.

January 2019- June 2019

Guilford Technical Community College, Jamestown, NC

Full time faculty

- Taught Algebra & Statistics
- Taught 20 credit hours

September 2017-August 2018

Eastern Oregon University, La Grande, OR

Visiting Assistant Professor

- Taught Algebra, Statistics, Calculus, Operations Research, and Group Theory
- Created a problem solving competition on campus and chess club.

August 2016- January 2017

Kauai Community College, Kaua'i, HI

Instructor

- Taught Algebra, and PreAlgebra
- Created a problem solving competition on campus.
- Started a chess club as part of the gamers club.

August 2013- July 2016

Bennett College, Greensboro, NC

Assistant Professor

- Taught Probability, Research Seminar, Calculus, and Analysis
- Created a problem solving competition on campus.
- Chess club faculty advisor. Received chess supply grant from the Susan Polgar Foundation.

August 2009- July 2013

College of the Bahamas, Nassau, Bahamas

Assistant Professor

- Taught Analysis I & II, Advanced Calculus, Abstract Algebra I & II, Complex Analysis, Linear Algebra, and Precalculus
- Volunteer at the gym and problem solving group.
- Created weekly problems and funded a problem solving contest on campus.
- Chess club faculty advisor (two time national chess champion)

December 2008- May 2009

Union County College, Cranford, NJ

Visiting Assistant Professor

- Taught Calculus III, Precalculus, and Algebra.
- Volunteer at the gym and problem solving group.

August 2006-July 2007

East Carolina University, Greenville, NC.

Visiting Assistant Professor

- Taught Algebra
- Active in the Chess and Outdoor Club

August 2005-July 2006

Coker College, Hartsville, SC.

Visiting Assistant Professor

- Taught Analysis, Calculus III , Statistics, and Algebra.
- Research advisor to several undergraduate students

August 2004-July 2005

Furman University, Greenville, SC.

Visiting Assistant Professor

- Taught Calculus and Finite Mathematics.
- Started a weekly game hour for faculty and students.

August 2003-August 2004

Lafayette College, Easton, PA.

Visiting Assistant Professor

- Taught Statistics, Discrete Mathematics, and Calculus

Fall 2002-Spring 2003

University of the Virgin Islands, VI

Visiting Assistant Professor

- Teaching Introduction to Statistics & Algebra

Fall 2001-Spring 2002

Villanova University, Villanova, PA.

Visiting Assistant Professor

- Taught Java programming.
- Taught three sections of Software Engineering, group projects can be viewed at <http://hawk.csc.vill.edu/~s02g##> , where ## ranges from 08-24.

Sept 1992 – Fall 2001

Temple University, Philadelphia, PA.

Graduate Student and Adjunct Faculty

- Taught Calculus, Precalculus, College Math, Algebra, Arithmetic.
- Taught Graduate Discrete Math class (Fall 2001).

Interests and activities

- Cycling – Biked across the country in 1996, toured through Arizona and New Mexico in 1997 and Georgia to Texas 2002. Expert level mountain bike racer. Created the Downtube folding bike company in 2013, all profits from overseas distribution go to orphanages.
- Running – Ran the Philadelphia Marathon (1996) and Bahamas Marathon (2011).
- Created a “Back to Eden” garden with over 500 fruit trees & bushes, hundreds of strawberries, multiple mushroom varieties. Growing & sharing will continue for the rest of my life.
- Yoga – Graduated Yoga Teachers Training from Sivananda Yoga retreat in the Bahamas. I also studied an energy healing modality called Theta Healing, I always volunteer my Theta services to anyone in need.
- Boxing – Trained by Joe Black, former #3 Middleweight in the world
- Taught Abs courses at Coker, Furman, UCC, UVI , and COB
- Chess – 2010 & 2013 Bahamas National Chess Champion. 2012 Bahamas International (non GM section) Champion, 2011 Bahamas Open Champion. 2012 New Providence Open champion.
- Triathlon – Competed in several Olympic distance events.