

# SUNGWON AHN

905 Casey Ct Unit 2  $\diamond$  Schaumburg, IL 60173

224-578-2147  $\diamond$  sahn02@roosevelt.edu

## EDUCATION

---

### **Ph.D. in Mathematics**

Purdue University, West Lafayette, IN

Aug, 2016

- Thesis: Oscillation of Quenched Slowdown Asymptotics of Random Walks in Random Environment
- Adviser: Jonathan Peterson

### **M.S. Mathematics Specialized in Computational Finance**

Purdue University, West Lafayette, IN

Aug, 2016

### **B.S. Mathematics/Actuarial Science/Finance**

Drake University, Des Moines, IA

Dec, 2007

- Passed Society of Actuary (SOA) Exam: P, FM, MLC, MFE, C

## RESEARCH INTEREST

---

Probability Theory and Discrete Stochastic Process - Random Walk in Random Environment, Interacting Particle Systems.

## EMPLOYMENT

---

### **Assistant Professor**

Roosevelt University, Chicago, IL

Aug 2016-Current

### **Teaching Assistant**

Purdue University, West Lafayette, IN

Aug 2009-Aug 2016

- Assisted Purdue Research in Mathematics Experience (PRIME) under Prof. Peterson on Summer 2016.
- Participated in the development of web-based calculus courses (Lon-Capa) using Perl language under Prof. O. Davis in year 2015-2016

### **Defined Benefit Analyst**

Principal Financial Group, Des Moines, IA

May 2006-Aug 2007

- Read and interpreted plan documents to perform calculation on defined benefit pension plans
- Updated and monitored computerized defined benefit computing system

## PUBLICATION

---

1. Quenched central limit theorem rates of convergence for one dimensional random walks in random environments(with J. Peterson), *Bernoulli Journal*, to appear
2. Oscillations of quenched slowdown asymptotic for ballistic one dimensional random walk in a random environment(with J. Peterson), *Electronic Journal of Probability* (2016)

## TEACHING EXPERIENCE

---

### Roosevelt University

Aug 2016-Current

- Developmental Mathematics(Math 95/96), Instructor
- Numerical Analysis(Math 430), Instructor
- Regression & Time Series (Math 349/449), Instructor
- Actuarial Mathematics I (Math 369), Instructor
- ANOVA & Experimental Design (Math 457), Instructor
- Actuarial Science Seminar: Exam P (Math 480-P), Instructor
- Actuarial Science Seminar: Exam FM (Math 480-FM), Instructor
- Topic: Applied Predictive Modeling (Math 489), Instructor

### Purdue University

Aug 2009-2016

- Plane Analytic Geometry And Calculus I(Math 161), Recitation
- Multivariable Calculus for Honors(Math 174), Recitation
- Multivariate Calculus(Math 261), Recitation

## PRESENTATION

---

- Mathematics Colloquium, Roosevelt University Mar, 2018
- Pie Day Talk, Roosevelt University Mar, 2017
- Mathematics Colloquium, Roosevelt University Sep, 2016
- Probability Seminar, Purdue University Sep, 2015
- Graduate Research Day, Purdue University Nov, 2015

### Invited Talk

- Actuarial Seminar, SUNY New Paltz Nov, 2017  
*Title: Essential Skills for Growing Role of Actuary*

### Contribution Paper Talk

- Joint Mathematics Meeting, San Diego Jan, 2018  
*Title: Oscillations of quenched slowdown asymptotic for ballistic one dimensional random walk in a random environment*

## SERVICE ACTIVITIES

---

### Journals refereed

Brazilian Journal of Probability and Statistics

### Co-organizer

Joint Mathematics Meeting, San Diego (Jan 2018)

*Panel: Assessing and Addressing Diverse Mathematical Background*

## COMPUTER SKILLS

---

### Programming Languages

Perl, C++, JAVA

### Software

Mathematica, Matlab, SAS statistical analysis, R, EXCEL

## AWARDS

---

- Iowa Collegiate Mathematics Competition (5th place), Iowa 2005
- Basil E. Gillam Freshman Math Competition (1st place), Drake University 2005

## ACADEMIC HONORS

---

Presidential Scholarship, Drake University

Aug, 2004-Dec, 2007

Beta Gamma Sigma (Honor Society of Business), Drake University

## PROFESSIONAL ORGANIZATION

---

**Member**      American Mathematical Society  
                    Mathematical Association of America  
                    Project NExT (Blue '17)