

# SUNGWON AHN

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## EDUCATION

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### **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

### **Received ASA(Associate of Society of Actuaries)**

Jun 2018

## RESEARCH INTEREST

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

## EMPLOYMENT

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### **Assistant Professor**

Roosevelt University, Chicago, IL

Aug 2016-Current

### **Teaching Assistant**

Purdue University, West Lafayette, IN

Aug 2009-Aug 2016

### **Defined Benefit Analyst**

Principal Financial Group, Des Moines, IA

May 2006-Aug 2007

## PUBLICATION

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1. Quenched central limit theorem rates of convergence for one dimensional random walks in random environments(with J. Peterson), *Bernoulli Journal*, (2019)
2. Oscillations of quenched slowdown asymptotic for ballistic one dimensional random walk in a random environment(with J. Peterson), *Electronic Journal of Probability* (2016)

## WORKING PAPER

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1. Optimal rates of Convergence for quenched central limit theorem rates fo one dimensional random walk in random environments (with J. Peterson), *in progress*
2. Phase transition in parking process with coalescing cars(with Mattew Junge, Hanbaek Lyu), *in progress*

## COURSES TAUGHT AT ROOSEVELT

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Developmental Mathematics(Math 95/96), Spring 2017, Fall 2017, Spring 2018  
Calculus(Math 231), Fall 2018  
Regression & Time Series (Math 349/449), Fall 2017, Fall 2018  
Actuarial Mathematics I (Math 369), Spring 2018  
Numerical Analysis(Math 430), Fall 2016, Fall 2018  
ANOVA & Experimental Design (Math 457), Fall 2017  
Actuarial Science Seminar: Exam P (Math 480-P), Spring 2017  
Actuarial Science Seminar: Exam FM (Math 480-FM), Spring 2017, Spring 2018  
Topic: Applied Predictive Modeling (Math 489), Spring 2018

## PRESENTATION

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- 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  
*Title: Essential Skills for Growing Role of Actuary* Nov, 2017
- AMS Sectional Meeting special session on “Effective Behavior in Random Environments”, Northeastern University, MA Apr, 2018  
*Title: Quenched central limit theorem rates of convergence for one dimensional random walks in random environments*

### Contribution Paper Talk

- Joint Mathematics Meeting, San Diego Jan, 2018  
*Title: Quenched central limit theorem rates of convergence for one dimensional random walks in random environments*

## WORKSHOPS AND OTHER CONFERENCES

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- Mathematical Research Communities (Topic: Stochastic Spatial Models) Jun. 2019
- Inquiry Based Learning Workshop, Depaul University, IL Jul, 2018
- Mathfest Aug, 2017, 2018
- Actuarial Teaching Conference, Pittsburg, PA Jun, 2017
- Seminar on Stochastic Processes, University of Virginia, NC Mar, 2017
- Illinois Section of the MAA Annual Meeting Spring, 2017
- Science Education for New Civic Engagement (Cencer) Summer Institute, 2016
- Summer School in Probability, Northwestern University, IL Jul 2016
- Midwest Probability Colloquium, Northwestern University, IL 2014, 2015, 2016

## GRANTS

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- SOA Education Institution Grants (\$5000) Sep, 2018

## SERVICE ACTIVITIES

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<b>Journals refereed</b>	Brazilian Journal of Probability and Statistics Electronic Communications in Probability
<b>Co-organizer</b>	Joint Mathematics Meeting, San Diego (Jan 2018) <i>Panel: Assessing and Addressing Diverse Mathematical Background</i>

## COMPUTER SKILLS

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<b>Programming Languages</b>	Perl, C++, JAVA
<b>Software</b>	Mathematica, Matlab, SAS statistical analysis, R, EXCEL

## AWARDS

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

## ACADEMIC HONORS

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Presidential Scholarship, Drake University	Aug, 2004-Dec, 2007
Beta Gamma Sigma (Honor Society of Business), Drake University	

## PROFESSIONAL ORGANIZATION

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<b>Member</b>	American Mathematical Society Mathematical Association of America Project NExT (Blue '17)
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