# Shuowen Wei

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#### **Education**

**Wake Forest University** 

Winston Salem, NC, U.S.A

Master of Arts and Sciences in Mathematics (Candidate)

GPA: 3.75 (so far)

09/2011-05/2013

Focus: Statistics and Discrete Mathematical Simulations, Programming in CS

Wuhan University Wuhan, China

Bachelor of Science in Applied Mathematics GPA: 3.50

09/2007-06/2011

Focus: Mathematical Models and Optimization, Statistics, Financial Mathematics

### **Graduate Level Courses**

>	2011Fall:	MTH731 General Topology (A)	MTH721 Abstract Algebra (A-)	
		MTH626/CS652 Numerical Linear Algebra(A)	MTH567 Mathematical Statistics I (A)	
$\triangleright$	2012Spring:	MTH752/CS765 Image Processing (A)	MTH659 Multivariate Statistics (A-)	
		CS621 Database Management Systems (A-)	MTH711 Real Analysis (B-)	
$\triangleright$	2012Fall:	MTH791 Thesis Research I	MTH656 Statistical Methods	
		CS641 Operating Systems	CS671 Artificial Intelligence	
		MTH655/CS655 Introduction to Numerical Methods		

#### **Skills**

Language Fluent English, Native Chinese Speaking Mandarin

Programming C++/C, Matlab, SQL, PHP/HTML, Lingo, R, SAS, LUNIX and DOS

Documentation Latex, Tableau, Microsoft Office

#### **Internship Experience**

#### Clinic Data Analyst

Winston Salem, NC, U.S.A

Biomedical Engineering Department, Wake Forest Baptist Medical Center

05/2012-08/2012

- Help build the data warehouse (I2B2) of WFBMC, work with Dr. Yaorong Ge
- Analyze the characterization of 750 million clinic data by Oracle SQL Developer and Tableau
- Visualize the results by Tableau and present them to the hospital leaders and project directors

#### **Working & Research Experience**

#### Research Assistant in Statistics and Discrete Mathematics Field

Winston Salem, NC, U.S.A

Department of Mathematics, Wake Forest University

11/2011-10/2012

- Simulation on ants' random walking based on pheromone for cyber network security by Matlab, Sponsored by Pacific Northwest National Laboratory (PNNL), Instructed by Dr. Kenneth S. Berenhaut, Dr. Errin Fulp
- Present methods and results to scientists from PNNL and ANL (Argonne National Laboratory)

#### **Teaching Experience**

Winston Salem, NC, U.S.A

Department of Mathematics, Department of Computer Science, Wake Forest University

09/2011-10/2012

- TA of Dr. Torgersen's CS101-"Introduction to Computer Science", 2012Fall
- > Tutor in the Math Center of Wake Forest University
- ➢ Grader for MTH111, 112 (Calculus I II), MTH205 (Applied Multivariable Mathematics), MTH353(Mathematical Models)

#### **Undergraduate Research Projects**

Wuhan, China

School of Mathematics and Statistics, Wuhan University

06/2009-09/2010

- Artificial intelligence algorithms and their applications in pattern recognition, Instructed by Dr. Xuming Yi
- Research of linear regression in finance and marking, Instructed by Dr. Aijiao Deng

#### **Awards and Honors**

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Member of Pi Mu Epsilon, the mathematical honor society				
Honorable Mention for Mathematical Contest in Modeling (MCM)				
Second prize in Hubei Province for China Undergraduate Mathematical Contest in Modeling (CUMC)				
	10/2010			
Second prize in Huazhong District (contains nine provinces) Mathematical Contest in Modeling	05/2009			
Second Prize Scholarship (top 5 in 42)	10/2010			
Third Prize Scholarship (top 10 in 42)	10/2009			

# **Training Experience**

Training for MCM (Mathematical Contest in Modeling) 01/2010-02/20	Training for MCM (Mathematical Contest in Modeling)	01/2010-02/2010
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> Focus: English writing

Training for CMC (China Mathematics Competition) 09/2009-11/2009

Focus: Mathematical problem solving abilities and skills)

Training for CUMCM (China Undergraduate Mathematical Contest in Modeling) 05/2009-08/2009

Focus: mathematics modeling, Matlab and Lingo programming and simulation contest

Training for ACM-ICPC (Association for Computing Machinery-International Collegiate Programming

Contest)

01/2010-02/2010

> Focus: programming skills and algorithms

## **Interests**

Soccer, Basketball, Tennis, Chess, Reading, Traveling