

# SHAN XU

(217)721-4334 | shanxu2@illinois.edu

508 E. University Avenue, Apt.420 • Champaign, IL 61820

## Education

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### University of Illinois

Urbana-Champaign, IL

Master of Science in Financial Engineering, December 2017

### Wuhan University

Wuhan, China

Bachelor of Science in Mathematics and Applied Mathematics, June 2016  
(Financial Mathematics Track)

- Outstanding Graduate (*Top 5%*) June 2016
- Second-class Renmin Scholarship (*Top 10%*) September 2015
- Merit Student (*Top 7%*) December 2015, 2014
- First-class Renmin Scholarship (*Top 5%*) September 2014
- Excellent Student Cadre (*Top 2%*) August 2014
- Second-class Renmin Scholarship (*Top 10%*) September 2013

## Experience

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### Bank of China, Guiyang, China

August 2015-July 2016

Credit Risk Intern

- Conducted descriptive data analysis in a data set with more than one million rows and fifty columns, which includes data for clients' personal financial information as well as macro economics data
- Applied variable clustering algorithm to achieve data dimension reduction, and built a personal credit scoring model by logistic regression.
- Finished a 25-page final report, presented the results to department directors as a team member

### COMAP's Mathematical Contest in Modeling (MCM), Eradicating Ebola Problem

February 2015

Meritorious Winners (Top 9%, 7600+ teams Worldwide)

- Adapted SIQR model to simulate the diffusion system of Ebola virus
- Applied SOM neural network to cluster the infected areas with similar urgency level
- Built an optimization model to meet the vaccines demands of every infected area and to minimize a weighted objective function of transportation cost and transportation time consumption
- Finished a 36-page paper, conducted all the numerical calculations, simulations as well as figures drawing by MatLab

### National Innovative Research Program for Undergraduates

May 2014-May 2016

Personalized Recommendation System Based on Social Media

- Selected as the top 10% teams out of 600+ teams in Wuhan University
- Adapted Web crawler in Python to extract tweets from clients' social network websites (social circle) as well as tweets from their social network connections (neighborhood structure)
- Built a grading function to filter high quality tweets according to their replies, re-tweets and URL amounts
- Applied LDA method to detect latent topics in high-quality tweets and used clustering method to further group them into several center topics
- Evaluated clients' correlation degrees with each center topic, and made recommendations based on the correlations

## Skills

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**Programming:** MatLab, R, C, Lingo, LATEX, EViews