ZIHAN SONG

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EDUCATIONAL BACKGROUND

M.S., University of Wisconsin- Madison   Sept. 2015 – May 2017 (expected)
Advisor: Dr. Robert Roth
GPA: 4.0

B.A., Wuhan University   Sept. 2011 - Jun. 2015
Advisor: Dr. Jing Tian
GPA: 3.73

INTERNSHIP EXPERIENCE

Esri Summer Internship

Geoevent Extension for Server, Professional Service

Redlands, CA, June. - Aug. 2016

- Helped to improve UI/UX and add cartographic elements for Geoevent demo
- Built Esri User Conference Plenary Demo for Geoevent team for showing real-time transit system of Auckland
- Started and managed real-time cartography project; displayed and compared real-time bus transit system of Los Angeles, New York City and Washington D.C.

Analysis of Tangshan City Infrastructure Facilities Damages after the Earthquake in 1976

Ministry of Technology, National Earthquake Response Support Service

Beijing, China, Jun. - Aug. 2012

- Digitalized paper geographical base maps and vectorized Tangshan city pipeline maps; analyzed pipeline damages caused by the big earthquake in 1976

Summarized and analyzed data on Tangshan water supply, natural gas and heating pipelines including starting and ending locations, lengths, pipe diameters and installation time with ArcGIS software

RESEARCH AND PROJECTS

Figure Group Design of *National Economic Atlas, New Century Version*

Wuhan, China, Jun. - Aug. 2014

- Designed the eighth figure group of China's insurance industry
- Collected data on premium income, compensation and benefits, insurance institutions number and the number of employees, as well as the depth and density of insurance in all provinces
- Analyzed the data using SPSS, and drew three maps with CorelDraw / ArcGIS; designed page layout

Grid Pattern Recognition in Road Networks Using the C4.5 Algorithm

National Natural Science Foundation of China funded

Wuhan, China, Jul. 2014 - Aug. 2015

- Proposed a new method for grid pattern recognition based on the idea of mesh classification through a supervised learning process using the C4.5 algorithm
- Defined new measurements for characterizing meshes, taking into account a mesh's individual characteristics and its spatial context
- Results were published in *CAGIS*

Visual Storytelling Coding

National Science Foundation funded

Madison, WI, Oct. 2015. – Feb. 2016

- Collected visual stories from New York Times, Wall Street Journal, Washington Post, BBC News, and National Geographic

- Entered stories into online database
- Coded visual stories based on technology and design strategies

Real Time Cartography

Esri, Redlands, CA, Jul. 2016. – Aug. 2016

- Connected between Geoevent team (Solutions- Professional Services) and Content team (Software Product)
- Started real-time project; managed touch-base meetings and daily PBIs
- Overplayed map tiles onto real-time bus aggregation to make real-time bus transit maps in three cities: Los Angeles, New York City and Washington D.C.

TEACHING

Graduate Teaching Assistant

Geography 370, Introduction to Cartography

University of Wisconsin- Madison

Department of Geography, Spring. 2016- Spring. 2017

GRANTS AND AWARDS

- Innovation in Space-Time Visualization. UW Madison Cartography Lab. Design Challenge (2016 $225)
- First place of 2016 Esri Intern Hackathon (2016 $125)
- Master's Thesis Research Grant. AAG Cartography Specialty Group (2016 $200)
- NACIS Student Travel Grant. North American Cartographic Information Society. (2016 $300)
- National Scholarship. Ministry of Education of China (2013 $1,500)
- Triple- A Student. Wuhan University (2013 top 3%)
- First Class Scholarship. Wuhan University (2012 $300)

PUBLICATIONS

Tian Jing, **Song Zihan**, Ai Tinghua. Grid Pattern Extraction in Road Networks with Graph. *Geomatics and Information Science of Wuhan University.* Vol.37 No.6, June 2012

Jing Tian, **Zihan Song,** Fei Gao, Feng Zhao. Grid Pattern Recognition in Road Networks Using the C4.5 Algorithm. *Cartography and Geographic Information Science.* DOI: 10.1080/15230406.2015.1062425

PROFESSIONAL AND UNIVERSITY SERVICES

North American Cartographic Information Society (member)

Maptime Madison (co-organizer)

Cartography Lab, University of Wisconsin–Madison (cartographer)

Women in Geography, University of Wisconsin–Madison (member)

INTERNATIONAL EXCHANGE EXPERIENCE

Sino-Singapore Undergraduate Exchange

Singapore, Feb. - Mar. 2014

- Visited Nanyang Technological University (NTU), National University of Singapore (NUS), Singapore Management University (SMU), and Singapore University of Technology and Design (SUTD) as one of the Chinese student representative in 11th Sino-Singapore Undergraduate Exchange (SSUE)