ZIHAN SONG

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EDUCATIONAL BACKGROUND

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

B.A., Wuhan University   Sept. 2011 - Jun. 2015
    School of Resource and Environmental Sciences
    Advisor: Dr. Jing Tian
    GPA: 3.73

INTERNSHIP EXPERIENCE

Intern, Esri, Redlands, CA
Esri Summer Internship
Geoevent Extension for Server, June. - Aug. 2016

- Helped to improve UI/UX and add cartographic elements for Geoevent demo
- Built Esri User Conference Plenary Demo for showing real-time transit system of Auckland
- Started and managed real-time cartography project

Intern, National Earthquake Response Support Service, Beijing, China
Analysis of Tangshan City Infrastructure Facilities Damages after the Earthquake in 1976
Ministry of Technology, Jun. - Aug. 2012

- Digitalized base maps and vectorized Tangshan city pipeline maps in 1976 earthquake
- Summarized and analyzed data on Tangshan water supply, natural gas and heating pipelines

TECHNICAL SKILLS

Cartography & GIS
- Mapbox Studio | ArcMap | Arc Pro | ArcGIS Online | CartoCSS

Programming
- JavaScript | D3 | Leaflet | GitHub | ArcGIS api for JavaScript | jQuery | Python

Design
- HTML | CSS | Bootstrap | Calcite | Illustrator | Photoshop

RESEARCH AND PROJECTS

Intern, Esri, Redlands, CA
Real Time Cartography
Jul. 2016. – Aug. 2016

- Connected between Geoevent team (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.

Project Assistant, UW- Madison Cartography Lab, Madison, WI
Visual Storytelling Coding
National Science Foundation funded, Sep. 2015. – May. 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

Project Assistant, Wuhan University, Wuhan, China

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

National Natural Science Foundation of China funded, 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, considering a mesh's individual characteristics and its spatial context
- Results were published in *CAGIS*

Project Assistant, Wuhan University, Wuhan, China

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

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

TEACHING

Teaching Assistant, UW- Madison, Madison, WI

- Geography 370, Introduction to Cartography
- 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)

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)

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