ZIHAN SONG

Software Development
Esri (Environmental Systems Research Institute)
380 New York Street, Redlands, CA, 92373

Email: zsong@esri.com
Phone: (608) 628-0621
Portfolio: zihansong93

EXPERIENCE

Senior Product Engineer, Esri, Redlands, CA

Software Development, June. 2017 - Now

- Contribute to adding new mapping functionality to ArcGIS Pro. Work on feature research and UIUX design of new mapping functions such as stream layer, GNSS, clustering, bivariate colors symbology, and other mapping enhancement
- Help improve the overall quality of the software ArcGIS Pro. Monitor test results for the team daily and help the team resolve test issues and investigate bugs from test runs
- Communicate and work with users to know about real-life use cases and user examples to help design software with better UX

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

EDUCATIONAL BACKGROUND

M.S., University of Wisconsin- Madison Sept. 2015 – May 2017

Department of Geography
Advisor: Dr. Robert Roth
GPA: 4.0
Thesis title: *Map-based Visual Storytelling: An Assessment of Emerging Genres and Tropes*

B.A., Wuhan University Sept. 2011 - Jun. 2015

School of Resource and Environmental Sciences
Advisor: Dr. Jing Tian
GPA: 3.73

TECHNICAL SKILLS

Expert
ArcGIS Pro| ArcMap| Geoevent| ArcGIS Online| Illustrator| Adobe XD| JavaScript

Intermediate
Esri Story Maps| C#| Mapbox Studio| Figma| Bootstrap| D3| Leaflet| GitHub| Photoshop

Beginner
Calcite| Python| ENVI| R| ArcPy

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

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
- Conducted supervised learning experiment; results were published in *CAGIS*

TEACHING

Teaching Assistant, UW- Madison, Madison, WI

- Geography 370, Introduction to Cartography (Spring. 2016- Spring. 2017)

GRANTS AND AWARDS

- First place of 2018 Esri Internal Hackathon (Hack the Map). Esri (2018)
- Trewartha Graduate Research Award. University of Wisconsin- Madison (2017 $400)
- Innovation in Space-Time Visualization. UW Madison Cartography Lab. Design Challenge (2016 $225)
- First place of 2016 Esri Intern Hackathon. Esri (2016 $125)
- Master's Thesis Research Grant. AAG Cartography Specialty Group (2016 $200)
- NACIS Student Travel Grant. North American Cartographic Information Society. (2016 $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

- **Song Z**, RE Roth, L Houtman, T Prestby, A Iverson, & S Gao. 2022. Visual storytelling with maps: An empirical study on story map themes and narrative elements, visual storytelling genres and tropes, and individual audience differences. *Cartographic Perspectives*. #100. 10.14714/CP100.1759
- Jing Tian, **Zihan Song**, Fei Gao, Feng Zhao. Grid Pattern Recognition in Road Networks Using the C4.5 Algorithm. *Cartography and Geographic Information Science,* 10.1080/15230406.2015.1062425
- 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