

Zhiwei (Iris) Yan

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995 Jefferson Commons Circle, St. Paul, MN 55114

EDUCATION

University of Minnesota - Twin Cities

Candidate for Master of Geographic Information Science

Minneapolis, MN

GPA: 3.9/4.0 | Anticipated in May 2019

University of Waterloo

Bachelor of Environmental Studies, Geomatics

Waterloo, Canada

September 2015 - June 2017

Minor in Computer Science

GPA: 3.73/4.0 | Dean's Honors List

Wuhan University

Bachelor of Science, Geographic Information Science and Cartography

Wuhan, China

September 2013 - June 2017

RELATED COURSEWORK

GIS: Advanced GIS, Advanced Remote Sensing, Spatial Database, Spatiotemporal Modeling, Web GIS and Services

Computer Science: Intro to Data Mining, Intro to Machine Learning, Spatial Computing, CyberGIS

WORK EXPERIENCE

Student Worker | Minnesota Department of Transportation (MnDOT)

St. Paul, Minnesota

- Produced Minnesota highway maps alongside 4 coworkers
- Provided advanced GIS and Mapping support to multiple business units with MnDOT

May 2018 - Present

Teaching Assistant | Advanced Geocomputing Course

Minneapolis, Minnesota

- Helped with assignment grading and designed the geospatial data and social media lab

September - December 2018

Student Assistant | Esri Federal GIS Conference

Washington D.C.

- Registered attendees and assisted with technical workshops

March 2018

Intern in Big Data Center | Guangdong Rural & Urban Planning and Design Institute

Guangzhou, China

- Collected POIs (Points of Interest) from online maps using Python
- Designed a location evaluation model and conducted analysis to select the optimal locations

June 2017 - August 2017

RESEARCH EXPERIENCE

Modeling Tourist Movement Using Modified Levy Flight

January 2018 - May 2018

- Proposed using a truncated biased Levy flight to simulate tourist movements in a city
- Used actual tourist movement data collected from Flickr to parameterize the movement model
- Developed an agent-based model and an interface in NetLogo to implement the model and control some parameters

Use VGI to Identify and Analyze Top Tourist Attractions

September 2016 - April 2017

- Collected over 230,000 geotagged photos from Flickr using PHP to visualize the spatial distribution of photos
- Automated differentiation between photo records using database techniques within MySQL

Mining Colocation Patterns of Hotels with the Q statistic

February 2015 - August 2017

Published in *Applied Spatial Analysis and Policy*, first author

- Collected hotel data in 10 cities and used the Q statistic to identify the distribution of different kinds of hotels
- Discovered the spatial association patterns of hotels and analyzed the reasons and the implications

SKILLS

Application Software: ArcGIS, Oracle, MySQL, MATLAB, SPSS, NetLogo, ENVI

Computer Languages: Python, C, C++, SQL, HTML, CSS, JavaScript