

# HAO ZHANG

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## EDUCATION

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### UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Master of Science in Geographic Information Science  
Illinois Professional Science Master's Concentration

Urbana - Champaign, IL  
August 2016 - December 2017  
GPA 3.96/4.00

### ZHEJIANG AGRICULTURE & FORESTRY UNIVERSITY

Bachelor of Science in Geographic Information System

Hangzhou, China  
September 2012 - May 2016

## EXPERIENCE

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### Gartner

Champaign, IL

#### Web Development & Data Visualization Intern

May 2017 - Present

- Developed back-end server and created APIs for web application using Node.js, Express and SQL Server
- Created responsive front-end UI using AngularJS framework, AngularJS Material Design, Bootstrap and jQuery
- Visualized results provided by big data analysis using NVD3.js, THREE.js with customized functions
- Built skills on Amazon Alexa to leverage data analysis using Amazon Skills Kit

### Zhejiang Agriculture & Forestry University

Hangzhou, China

#### Research Assistant

September 2014 - November 2014

- Used Monte Carlo method to generate and simulate the elevation value in reality
- Combined probability into existing D8 algorithm to improve the accuracy of water flow calculation
- Fulfilled this algorithm by writing C# program

## PROJECTS

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### Web Map Application for CUMTD Bus Service

Urbana - Champaign, IL

#### Independent Project

February 2017 - May 2017

- Developed website and visualized real-time bus location and route information of CUMTD services
- Used Google Map API to create basic map and functions; created and designed UI using Bootstrap framework
- Utilized jQuery and AJAX to update transportation JSON data acquired from CUMTD API on web map

### Management Information System for Endangered Woods

Hangzhou, China

#### Team Leader

June 2015 - July 2015

- Designed the database for managing endangered woods; designed and implemented the user interface by XAML
- Realized a .Net framework web application in 3-tier structure using WCF, ArcGIS API for Silverlight, SQL Server with C# and PetaPoco, an Object-Relational Mapping tool to encapsulate the data to object in the program
- Achieved functions such as load and display the spatial data on the web map and basic database operation

## PUBLICATION

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### Analysis of the Near-surface Wind Strength Based on GIS, Hu Chendi, Mo Fei, Liu Ruiling, Zhang Hao, Chen

Yonggang, *Shandong Industrial Technology*, 2014-10-30, P129

## ADDITIONAL

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- Languages: English (Fluent), Chinese (Native)
- Certificated in SIYB (Start & Improve Your Business) training
- Software Skills: Visual Studio, SQL Server, ArcGIS, QGIS, AutoCAD, ENVI, MATLAB
- Programming Skills: JavaScript, C#, Java, Python, R, HTML, CSS
- Technologies: AngularJS, Node.js, Bootstrap, Express, jQuery, WebGL, Three.js, NVD3.js, WCF