HAO ZHANG

1329 N Lincoln Ave • Urbana, IL 61801 • 217-904-4624 • haoz2@illinois.edu • https://lucian33.github.io/portfolioWebsite/

EDUCATION

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

GARTNER

Champaign, IL

Web Development & Data Visualization Intern May 2017 - Present

- Worked in web develop team using Agile method; Led the intern team in various web development tasks
- Developed back-end server and created **RESTful APIs** for web application using **Node.js**, **Express** and **SQL**
- Created responsive front-end UI using AngularJS framework, AngularJS Material Design, Bootstrap and **iQuery**
- Visualized results provided by big data analysis; Created highly customized visualizations with filtering, drill down functions using NVD3 and THREE.js
- 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 algorithms by writing C# programs

PROJECTS

CUMTD Bus Helper: LBS based web application

Champaign, IL

GitHub: https://lucian33.github.io/CUMTD-WebApplication/

Independent Project

February 2017 - May 2017

- Developed web application using AngularJS framework and Google Map API
- Visualized real-time bus location and route information of CUMTD services
- Created and designed mobile-friendly responsive UI using AngularJS material design and CSS3 flexbox
- Utilized **¡Query** and **AJAX** to update transportation JSON data acquired from CUMTD API on web map (HTML, JavaScript, CSS)

MANAGEMENT INFORMATION SYSTEM FOR ENDANGERED WOODS

Hangzhou, China 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 ORM tool to encapsulate the data to object in the program
- Achieved functions such as load and display of the spatial data on the web map and basic database operation

PUBLICATION

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

- 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, React, Node.js, Bootstrap, Express, ¡Query, WebGL, Three.is