

# STEPHANIE YUNQI ZHANG

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## HIGHLIGHT

- Certificates:
  - Microsoft Certified: Azure Data Engineer Associate
  - Microsoft Certified: Azure Data Fundamentals
  - Microsoft Certified: Dynamics 365: Finance and Operation Apps Developer Associate
- Programming Languages: python, SQL, JavaScript, HTML, and CSS
- Frontend developing: Vue and React framework, Echarts, and Element UI
- Data management: PostgreSQL, postGIS, SQL Server and Oracle database
- Language: fluent in English, Cantonese, and Mandarin, intermediate in reading and written German
- Personal Website: <http://stephanieieie.github.io/>

## EDUCATION

<b>UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN</b> (top 100 worldwide) Master of Science in Geographic Information Science Illinois Professional Science Master's Concentration	Urbana-Champaign, US December 2017
<b>UNIVERSITY OF TORONTO</b> (top 100 worldwide) Bachelor of Arts in Urban Studies Minors in Geographic Information Science and German Studies	Toronto, Canada June 2015

## Experience

<b>KPMG</b> <b>Software Engineer</b>	Shenzhen, China May 2021-present
<ul style="list-style-type: none"><li>• Develop financial report functions to auto-generate reports of transaction and user data from postgres SQL database, and upload reports to SFTP server</li><li>• Transform data from various services in real-time with Microsoft Azure Service Bus, performed data wrangling and loading into CRM module</li><li>• Participate in backend product module development with nestJS and typeorm, including creating APIs and improving workflows</li><li>• Develop an online management platform with React, fulfilling UI designs and communications with backend services</li></ul>	
<b>HAOYA INFORMATION TECHNOLOGY</b> <b>Software Engineer</b>	Guangzhou, China July 2018-April 2021
<ul style="list-style-type: none"><li>• Developed desktop GIS tools to semi-automate spatial data conversion and analysis using python</li><li>• Created national-wide 3d terrain base map with NASA satellite image using hillshade and Pansharpening tools</li><li>• Responsible for database maintenance of Oracle database, and spatial data management of ArcSDE geodatabase</li><li>• Developed online map components to fulfill spatial needs for comprehensive projects</li></ul>	
<b>DOW AGROSCIENCE</b> <b>GIS Intern</b>	Urbana-Champaign, IL, US March 2017-December 2017
<ul style="list-style-type: none"><li>• Collected and managed spatial data, and developed scripts with Python and R to automate ESRI map production</li><li>• Assisted with normalizing enterprise server database, applying database constraints, and developing python scripts to implement quality assurance/control for enterprise GIS</li><li>• Provided continuous improvement and support for web application through debugging and reporting</li><li>• Used PowerBI to create interactive technical report for business intelligence purpose</li></ul>	

## **ABUNDANT SOLAR ENERGY**

### **GIS Analyst**

Toronto, Canada

June 2016-November 2016

- Collected soil, zoning, and property information in Ontario, Canada, and Maryland, US
- Built models to automate site selection for solar farms, and decision making on project areas with ArcGIS and python script
- Built interactive web maps for project development tracking through ArcGIS Online

## **Project**

### **Wilson Project Data Management– KPMG**

October 2021 – October 2022

Description: develop CRM module, transfer data to archive database, create financial report

Contents:

- Extracted data from postgres SQL databases using APIs and Service Bus in real-time
- Validated data by filtering records with values in expected range, analyzed rejected records and modified the extraction process on an on-going basis
- Performed data transformation, including data cleansing, removing duplicate records, applied business rules in data conversion, and prevented syncing malfunction to ensure data integrity
- Published data to CRM with Dynamics 365 APIs, managed storage in Dynamics365 by setting routine deletion jobs and optimizing settings
- Designed archive database in Microsoft SQL Server and created APIs to initiate historical data transferring
- Developed a data warehouse and transferred the cleansed data daily with a hopping window
- Auto-generated financial reports at monthly basis, aggregated data based on business requirement, and exported reports in CSV format to SFTP servers

Results:

- Automated data streaming from different sources to Dynamics365 CRM and archive database
- Finished nearly 40M historical data transferring in batch to archive database
- Supported business intelligent department with data ready for analytics in CRM and financial department with monthly financial reports

### **Online 3D Trail Platform – HAOYA INFORMATION TECHNOLOGY**

December 2020 – April 2021

Description: Created online platform to visualize drone flight trails

Contents:

- Provided options for users to query past flight records from the database using Axios
- Created 3D models with query results using Three.js
- Offered simple analysis abilities, such as trail sectioning and height measurement

Results:

- Assist users to review past flights with straight forward 3D visualization
- Currently in testing stage to implement the platform into the drone pilot test system

### **Upgrade Map Component – HAOYA INFORMATION TECHNOLOGY**

July 2019 – November 2020

Description: Upgrade existing online map platform with reference of most updated industry mapping service

Contents:

- Vectorized spatial data and created mbtiles using open-source tools, hosted tiles on tileserver
- Utilized Mapbox to create web maps and turf.js to performed spatial analysis
- Built the new platform using Vue framework with management tool of Vuex
- Designed interface with Element UI, visualized data with Echarts, and created frontend page with JavaScript, CSS, and html

Results:

- Improved the cartography of the map component and the efficiency of spatial data maintenance procedure
- Offered more interaction for users to query data, and provided useful data visualization and analysis
- Gradually replaced existing mapping components of all projects

- Offered simple analysis abilities, such as trail sectioning and height measurement

Results:

- Assist users to review past flights with straight forward 3D visualization
- Currently in testing stage to implement the platform into the drone pilot test system