Zhiqian (Cindy) Zhou

(573) 289-4092 · zhiqian5@illinois.edu · 1901 N Lincoln Ave, Apt 319B, Urbana, IL 61801

EDUCATION

Master of Computer Science **August 2019-December 2020**
University of Illinois at Urbana-Champaign Urbana-Champaign, Illinois

Bachelor of Science in Computer Science **August 2017-May 2019**
University of Missouri (GPA:3.9/4.0) Columbia, Missouri

Bachelor of Engineer in Software Engineering (Dual Degree Program) **September 2015-July 2017**
South China University of Technology (GPA:3.7/4.0) Guangzhou, Guangdong

RELATED EXPERIENCE

Software Developer, University of Missouri, Columbia, Missouri. **August 2018-May 2019**

MU Research Publication Search Engine (Capstone)

- Integrated in an Agile Framework with a scrum team of 7 developers building cross-browser compatible web apps for users to find faculties with similar research interest and discover relevant publications on a weekly basis
- Developed related-article recommendation system using Word2Vec model to embed article, Bi-LSTM model for multi-label classification and Latent Dirichlet Allocation to calculate article similarity
- Built related-article recommendation web service using Python Flask Framework, transformed raw data from PubMed into MongoDB for near real-time search
- Encapsulated application into a reusable module by Docker containers using Pipenv as virtual environment version control

Research Assistant, Digital Biology Lab, University of Missouri, Columbia, Missouri. **August 2018-May 2019**

Detection of Oil Concentration on Water Image

- Cooperated with US Geographic Survey which provided images of water samples with different oil concentration to develop a mobile application detecting oil pollution on local water based on images
- Implemented binning method to group features and tuned regression models based on VGG16 ensembled with lightGBM, XGBoost to predict water pollution level
- Evaluated experiment results by providing confidential level graph for different bins, achieved 95% in R-Square score and applied the model into mobile application

Software Developer, Nanova Biomaterials Inc., Columbia, Missouri. **January-May 2018**

Application for Nanova Biomaterials Inc.

- Collaborated with developers in a small agile team with weekly stand-up to develop a desktop application for Nanova researchers to analyze composition and content of airborne substances
- Calculated the baseline, peak and other attributes of waveform provided by Nanova using Matlab
- Designed and implemented front-end buttons, charts, etc. in XML based on Syncfusion UWP, and backend logic, page jumps and data visualization using C#

PUBLICATION

Ming, L., **Zhiqian, Z.,** Penghui, S., & Dong, X. (2019). Fuzzified Image Enhancement for Deep Learning in Iris Recognition. *IEEE Transactions on Fuzzy Systems.* Advance online publication. doi:10.1109/TFUZZ.2019.2912576

Ming, L., Lei, N., & **Zhiqian. Z**. (2018). Application of T-S fuzzy neural network to intelligent diagnosis of coronary heart disease. *Science & Technology Review*, *36*(17), 91-96.

TECHNICAL SKILLS

Computer language and toolkits: C++, C#, JAVA, XML, SQL, Python, Matlab, Docker, Git

Operate System: Windows, Linux

Core Curriculum: Data Structure and Algorithm, Object Oriented Programming, Database System, Machine Learning