Suwen Jin

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EDUCATION

University College Dublin Dublin, Ireland
Master of Science, Computer Science *Sep 2022 - Jan 2024*
GPA: 3.54/4.2

Xiamen University Tan Kah Kee College Xiamen, China
Bachelor of Engineering, Environmental Science and Engineering *Sep 2018 - Jun 2022*
GPA: 3.4/4.0 (Ranking: 18/192)

SKILLS SUMMARY

Experiences in Computer Science with focus on data analysis, machine learning, and web development projects.

- **Selected key courses:** Data Analytics, Data Structures & Algorithms, Web Application Development,etc.
- **Programming Languages:** Python, Java, Javascript etc.
- **Database Management:** MySQL, PostgreSQL, Redis, MongoDB.
- **Machine Learning:** Scikit-learn, TensorFlow.

Solid basic knowledge on Environmental Science and Engineering. Laboratory experience with a focus on Water Treatment and Water quality measurement.

- **Selected key courses:** Air Pollution Control Engineering, Environmental Statistics, Ecological Engineering, Basis of Chemical Engineering Principle etc.
- **Experimental skills:** GC-MS, HPLC-MS, UV-Vis

General research skills.

- **Data Analysis:** Origin, MATLAB, Google Analytics.
- **Design Tools:** LaTeX, Figma, Adobe Illustrator, AutoCAD

PROJECT

NYC Travel Guide App Dublin, Ireland
University College Dublin *Jun 2023 - present*
Advisor: Prof. Gavin McArdle and Prof. Fatemeh Golpayegani

- Managed application deployment using Docker for seamless and efficient deployment process, ensuring high application availability and smooth updates.
- Collected and preprocessed historical taxi data, optimizing data quality; Trained machine learning models (e.g., Linear Regression, Random Forest) to predict future taxi data.

Dublin Bike Website Dublin, Ireland
University College Dublin *Feb 2023 - April 2023*
Advisor: Dr. Aonghus Lawlor

- Deployed a Flask website on an AWS EC2 server, creating a VPC and subnet for secure access to the website.
- Implemented Machine Learning Random Forest model and LSTM to improve the accuracy and stability of the bike usage data, resulting in more accurate predictions of bike availability for users.

Removal of NDMA from Water by UV-Advanced Oxidation Process Xiamen, China
Xiamen University Tan Kah Kee College *Jan 2021 - Apr 2022*
Advisor: Prof. Xiaosong Zha

- Utilizing SPE-HPLC to analyze components of solution which was processed by AOPs, Calculated the content of fixed components based on features of graphs.
- Demonstrated skill in interpreting experimental data, enabling the identification of pseudo-first-order kinetics in chemical reactions.

Transformation of Chloride Ions in Electro-Oxidation Technology　　　　Shanghai, China

Fudan University, Tongji University　　　　*Jul 2021 - Sep 2021*

Advisor: Prof. Yan Liu and Ms. Chenxi Li

- Operated and maintained lab instruments(GC-MS,HPLC), analyzed pre-made Trichloromethane samples using mass spectrometry, and superimposed chromatograms of different samples to test the content changes.
- Made detailed observations and produced graphs based on the experimental findings.

UAV-based waterbody image catching and water quality measurement　　　　Xiamen, China

Key Laboratory of Estuary Estuarine Ecological Security and Environmental Health　　　　*Jan 2021- Mar 2021*

Advisor: Prof. Liang Zhou

- Corrected the distortion and blurriness of photos using Digital Orthophoto Map technology, resulting in enhanced image quality for further analysis.
- Demonstrated proficiency in data processing and analysis, facilitating the evaluation of water quality parameters for effective environmental monitoring and research.

EXPERIENCE

- **Genhouse Pharmceutical Co., Ltd**　　　　Suzhou, China
  Research & Development Intern　　　　*Jan 2022 - Apr 2022*

  - Worked within the Lab information management system (LIMS) to document maintenance, repairs and calibration of equipment.
  - Performed transformation experiments either for event generation or process improvement as planned by the team and document progress.

- **China Post**　　　　Suzhou, China
  Data Analysis Intern　　　　*Jun 2021 - Sep 2021*

  - Built and maintained automatic reporting processes, creating reusable and scalable SQL scripts that improved operational efficiency by 40%.
  - Selected and analyzed data using Excel and SQL, effectively transforming the data into structured representations using graphs.

PUBLICATIONS

Xiaosong Zha, **Suwen Jin**, Qian Zhao, Peinan Huang, et al. Study on removal of NDMA from water by UV-based Advanced Oxidation Technology.[J] *Chinese Journal of Water Treatment Technology*, **2022**, 48(09):32-37.

XiaoSong Zha, Lin Zhang, YuanJie Weng, ZhiLiang Feng, **Suwen Jin**. Reductive Degradation of NNitrosodimethylamine in Water by Ultraviolet Advanced Reduction Processes[J]. *Chinese Journal of Applied Chemistry*, **2022**, 39(3): 451-460.

AWARDS

Excellent Student Scholarship (awarded to the top 10% of the grade)　　　　2018, 2019, 2020, 2021

Group Leader Award, Provincial level　　　　2020

College Students' Innovative Entrepreneurial Training Plan Program

Third Prize, Group leader　　　　2019

School Science Contest on Energy Saving Emission Reduction

PERSONAL DETAIL

Nationality: Chinese

Gender: Female

Birthday: 2000-04-20

Ireland student residence permit(Stamp 2)