

# XINRU WANG

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## EDUCATION

### Chongqing University

*Bachelor of Engineering in Software Engineering*

Chongqing, China

Sep 2017 - Jun 2022

- **GPA:** 3.53/4.00
- **Relevant Coursework:** Data Structure and Algorithms, Database Principle and Design, Software Architecture and Design Patterns, Introduction to Artificial Intelligence, Introduction to Information Security, Introduction to Data Science, Discrete Mathematics
- **Awards:**
  - Academic Scholarships (awarded for **four** consecutive semesters)
  - Tang Zhongying Moral Education Scholarship (awarded to **four** students)
  - Excellent Engineer Award
  - Second Prize in the Contemporary Undergraduate Mathematical Contest in Modeling

### University of Cambridge

*CL Global Cambridge Summer Academic Program, AI Class*

Cambridge, UK

Jul 2019 - Aug 2019

- Completed coursework and projects on Computer Science & Artificial Intelligence.
- Collaborated on the project “Graph Theory Application and Text Data Classification” in a team and received the “Best Group Project” award.

## PUBLICATIONS

**Wang, Xinru, Jin, Xinran, Wu, Yongqiang, Liao, Yajing, and Lei, Dongchen.** “Predicting product sales based on sentiment analysis using reviews: The case of Amazon's kindle.” ACE 6 (2023): 1641-1651. DOI: 10.54254/2755-2721/6/20230784.

## RESEARCH EXPERIENCE

### Data Science: Machine Learning and Natural Language Processing

Remote

*Lead Developer - Advisor: Dr. Patrick Houlihan, Columbia University*

May 2022 - Jul 2022

- Conducted research on analyzing the potential influence of reviews.
- Proposed a novel approach to predict sales by identifying the time lag of the interaction between reviews and sale fluctuations.
- Published a paper accepted by the 3rd International Conference on Signal Processing and Machine Learning (CONF-SPML 2023) as the lead author: “Predicting Product Sales Based on Sentiment Analysis Using Reviews: The Case of Amazon’s Kindle.”

### AI-aided Medical System For Short Stature Diagnosis

Chongqing, China

*Developer - Advisor: Prof. Mengning Yang*

Nov 2021 - Jun 2022

- Applied deep learning techniques to assess the left hand-wrist radiographs of children for growth disorder diagnosis.
- Participated in the model training using attention-maps to identify the discriminative region for bone age expectation regression.
- Analyzed functional requirements, designed, and implemented a system for that purpose. Visit <https://sirenar.github.io/graduate-project-baa>

### LinkLocker: Smart Locker for Online Trading, Supported by a WeChat Mini Program

Chongqing, China

*Group Leader & Developer - Advisor: Prof. Mengning Yang*

Sep 2019 - Dec 2020

- Created a WeChat-based mini program that serves as a social platform for information sharing and second-hand goods sales, from ideation to application, by leading a team of eight developers.
- Led an eight-member team to design and build a smart locker; the locker is equipped with Bluetooth LE IoT sensors for secure, self-service item exchange, enabling password-protected access and eliminating waiting times.
- Won the First Prize Award in the Southwest Division Selection Tournament of the 13<sup>th</sup> iCAN International Contest of Innovation.
- Receive angel investment amounting to over 2 million RMB from investors including STO Express.
- Granted a patent for an innovative invention. **Patent No.202021785066.3, Date of Grant: 2021.1**

### Graph Theory Application and Text Data Classification

Cambridge, UK

*Participant - Advisor: Dr. Thomas Sauerwald*

Jul 2019 - Aug 2019

- Adopted a graph-based approach for contextual text normalization.
- Proposed a model – GRFEM (Gated Recurrent Feature Extraction Model) to encode-decode inputs and feed the neural network to normalize tokens.

## PROFESSIONAL EXPERIENCE

### Meituan Inc

Chengdu, China

*Software Developer (full-time)*

Jul 2022 - Present

- Played a key role in the design and development of the low-code cloud-based development platform Wolf, a comprehensive online platform for building enterprise-level applications using low-code technology, and employed AIGC for user support.
- Implemented, maintained, and refactored Diting (谛聽), an internal CRM tool that enables frontline business analysts to perform self-service data retrieval and integration in drag-and-drop gestures, resulting in good user feedback.
- Migrated 6 existing projects to a comprehensive gateway for architecture upgrading, robustness, and scalability enhancement.
- Received promotion to Level 6 within one year for exceptional contributions to the company.

**Meituan Inc***Intern - Front-end Developer***Chengdu, China**

May 2021 - Sep 2021

- Assisted with implementing features in various projects, including user experience optimization and UI design enhancement.
- Coded adhering to latest standards and best practices, and engaged in the continuous delivery process.
- Performed timely troubleshooting and resolved technical issues.

**Chongqing Xiantao Big Data Valley***Intern - Knowledge Manager***Chongqing, China**

Summer 2020

- Engaged in on-site research at an optical fiber manufacturing facility, contributing to the collection and processing of shop floor and manufacturing data utilizing a cloud platform and MES to facilitate the construction of data-driven decision-making models.
- Drafted a knowledge management planning proposal for knowledge sharing between projects.

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**EXTRACURRICULAR ACTIVITIES**

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**Building and Running a Personal Website***Blogger & Developer***Online**

Jul 2021 - Present

- Constructed a website to show portfolio and share thoughts, visit <https://sirenar.github.io>
- Wrote 66 blogs and implemented features for comment and blog categories.

**Campus Student Union***Director of the Liaison Center in the Student Union Secretariat***Chongqing China**

Sep 2017 - Jan 2019

- Managed campus, college, and class-level liaison, as well as intercollegiate communication.
- Honored with the “Star Staff” award.
- Served as a grade manager, organizing internal college events and assisting tutors with scholarship applications.

**Miscellaneous Volunteer Activities***Volunteer***Chongqing, China**

2018 - 2019

- Engaged in volunteer activities such as “Community Classroom,” “Love Tutoring,” “Kindness 100 Care Packages,” and “Bookworm Volunteer Service,” in collaboration with the local governments.

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**SKILLS & INTERESTS**

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**Coding Skills:** Python, C++, R, TypeScript, JavaScript (including Node.js), Java, Shell scripting, SQL, CSS**Software & Tools:** Git, Visual Studio Code, MySQL Workbench, Postman, Jenkins, Chrome DevTools, VirtualBox, Anaconda**Languages:** Mandarin (native), English (fluent)**Interests:** Go (four-dan, once won city-level women’s championship)