

Cheng Wang

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Massachusetts Institute of Technology (MIT)

Jun. 2018

B.S. in Electrical Engineering & Computer Science, Minor in Mathematics

GPA: 4.4/5.0

Experience

Art of Problem Solving, Math Instructor

Jun. 2025 - Present

- Prepare and deliver contest math curriculum for advanced middle and high school students with an emphasis on personalized, proof-based instruction
- Prepare students for national level math contests such as MathCounts / AMC 8 / AMC 10 / AMC 12

Wyzant, Tutor

Jan. 2022 - Present

- Prepare students for AP and standard subjects - AP Computer Science / AP Calculus AB & BC / AP Precalculus, PreAlgebra, Algebra 1 & 2, Geometry, SAT / ACT Math, Middle to High School Contest Math
- 1000+ hours tutoring (250+ are logged on the Wyzant platform). Reviews: [wyzant.com/Tutors/cw95](https://www.wyzant.com/Tutors/cw95)

IXL Learning, Software Engineer

Apr. 2024 - Dec. 2024

- Develop features and implement bug fixes for the Rosetta Stone Web Application
- Responsibilities include updating and creating email templates, UI redesign and new features for the site across 11 different subdomains, and configuring redirects within the site.
- Create and update sales campaigns according to sitewide promotions (including new banners and pricing features), create cypress tests, and retire legacy code.
- Test all features in QA environment and deploy new features to production on a biweekly schedule

Meta, Software Engineer

Aug. 2022 - Nov. 2023

- Develop new features for the Business Privacy Engineering Team which include refactors of old projects and creation of new internal tools. This streamlined tracking of internal metrics.
- Developed an internal tool to identify internal data assets which violate 1st person / 3rd person privacy policy, and automate detection of such data assets (over 30,000 assets affected)

IXL Learning, Software Engineer

Dec. 2020 - Feb. 2022

- Develop new features for Vocabulary.com, which included UI redesign, implementing a payment screen to allow Sales Team to fulfill purchase orders using Stripe, and implementation of the Word of the Day Feature.
- Develop new features for Vocabulary.com's Order Management System (internal tool). This included improving the user search tool to allow querying for a user by email and keyword search, adding a feature which can select a range of dates and generate a report of sales in that date range, and various features on the user's profile page.
- Worked with the Sales Team to create email templates and send them automatically via mailing lists on a predefined schedule (welcome email, start free trial email, end of trial email, boost user engagement email, etc.). Was responsible for making sure the emails were rendered properly across various email clients on web and mobile.
- Detect cheating users or bots. Wrote a python script to search the Mongo database for questions answered vs time elapsed and plotted the data using K Means clustering. This gave insights on the speed and accuracy of our user base, but also allowed us to pinpoint the outliers - users who used browser extensions or bots to unfairly score points.
- Work with the literacy team to maintain and support the Vocabulary.com dictionary. This involved adding, removing, and updating words in MongoDB on a regular basis. Added features to the internal

tool to allow adding and grouping definitions to be drag-and-drop responsive.

- Fix bugs reported by the CS Team. Bugs include everyday user bugs such as timezone inconsistencies between user profile and database, miscalculated points, audio issues for each word, a feature to prevent users from creating word lists with bad words, etc.

Johnson & Johnson, Software Engineer

Apr. 2019 - Jun. 2020

- Developed the J&J Interview Examination Web Application for potential hires. Supports administrator and test taker accounts. Administrators create the exam via user interface, and potential hires login via test account to take the exam.
- Developed a job monitoring internal tool called Aggrify by creating various reports which retrieved job-data from a database and displayed it visually on the frontend.

Skills:

- Programming Languages: HTML, CSS, Javascript, Python, React, Java
- Machine Learning: Regression, Classification, Clustering, Neural Networks
- Data Analysis Tools: Jupyter Notebook
- Data Visualization: Matplotlib, Seaborn, Plotly
- Databases: SQL, MongoDB
- Version Control: Git, GitHub
- Data Cleaning and Preprocessing

Projects:

Little Lemon Restaurant Web App

Description: A full stack web application which simulates a restaurant website. A user can log into their account, view and order from the restaurant's menu, add items to their cart and checkout. The user can also book a reservation in advance, view order history, and view upcoming reservations. Cookies are used to save a user's login information and cart history.

Tools/Technologies: React, NodeJS, MongoDB

GitHub: <https://github.com/sirDevelop/little-lemon-app>

E-Commerce Web App

Description: An e-Commerce Web app which allows user login via Google OAuth, shopping via a catalog and adding items to a cart. The user can check out their items, pay via Stripe, and view their order history. Cookies are used to save the user's login information and cart history.

Tools/Technologies: React, NodeJS, MongoDB

GitHub: <https://github.com/sirDevelop/ecommerce-web-app>

Analysis of Cyclistic Bikes Case Study

Description: An end to end analysis of data in a bike share company called Cyclistic where we determine how members and nonmembers use bikes differently, as to increase member conversion rate. Determined peak riding hours and periods, peak riding stations, total distance comparison, and which bikes are most commonly used.

Tools/Technologies: Python (Numpy, Pandas, SciKit Learn)

GitHub: <https://github.com/sirDevelop/Cyclistic-Bike-Study>

Certifications

- Google Data Analytics Professional Certificate
- Meta Frontend Developer Professional Certificate
- Meta Backend Developer Professional Certificate
- Microsoft SQL Server Professional Certificate