

# Dannong Wang

## Education

### Rensselaer Polytechnic Institute

Bachelor of Science in Computer Science, GPA: 3.69

Troy, NY

Aug 2019 - Dec 2022

## Experience

### Undergraduate CS Mentor for Operating System, Rensselaer Polytechnic Institute

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Troy, NY

May 2022 - Aug 2022

- Assisted students with homework and held office hours on topics like Multi-Threaded Programming, Synchronization, Memory Management, and CPU Scheduling.

### Web Development Internship, Huafeng-AccuWeather

Express.js

MongoDB

Azure

Beijing, China

Dec 2020 - Feb 2021

- Developed a REST API that uses NLP to answer natural language weather questions. Used Postman to test the API. Designed test cases and discovered bugs on inaccurate responses.
- Built NLP models using Azure Language Understanding with techniques like Named-entity recognition and integrated the models into the API.
- Improved the relevancy of the API's responses for vague or incomplete queries by utilizing historical input including city name and date prediction.
- Conducted testing with performance metrics such as precision and recall. Utilized Azure DevOps for deployment with CI/CD.

## Projects

### University MarketPlace

Angular

Express.js

MongoDB

Sept 2021 - Dec 2021

- Implemented inventory management, order processing, and payment processing features. Used Passport.js and JWT for API authentication.
- Created a responsive, user-friendly single-page application by utilizing Angular and Material UI. Used Storybook to develop components and create documentation.
- Created automated product categorization and product recommendation feature using Google Cloud Vision AI and ML algorithms like Content-based Filtering.
- Deployed to Google Cloud and implemented CI/CD pipeline using Cloud Build.

### LEGUP, A tool to teach formal logic using puzzles

Java

Sept 2022 - Dec 2022

- Worked in a team to develop an open source application, LEGUP ([GitHub](#)), using Git and agile methodologies.
- Created validation functions for puzzles to check puzzle integrity after edits while leveraging object-oriented design principles. Used Junit to write automated tests for puzzle validation functions.
- Created features to update a list of dependencies used and their license in markdown using Gradle. This will assist future developers in using the list as a reference and ensure compliance with licenses.
- Used the state design pattern to develop the puzzle board view by creating state classes for each state of the puzzle board, which allows new states and features to be easily developed in the future.

### University Event Scheduler

React

Express

PostgreSQL

Jan 2021 - Apr 2021

- Implemented front-end and back-end with events and venue creation, comments, time conflict detection, and email notification features. Used Jest and Enzyme to conduct React unit testing, including snapshot testing.
- Created an interactive map displaying available campus venues using Mapbox API with React Map GL. Created dynamic forms for event creation and registration using React Hook Forms.
- Designed and normalized database schema and used PostgreSQL triggers to handle database logic.

## Skills

### Languages

Java, Python, C/C++, JavaScript, TypeScript, HTML/CSS.

### Frameworks & Libraries

Angular, React, Node.js, Express.js, Django, Jest, JUnit, pandas, scikit-learn, NumPy

### Database

SQL, MongoDB