

# 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.

### Machine Learning Intern, 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 build and test the API.
- Used Azure Language Understanding to build NLP models with techniques like Named-entity recognition and integrated the models into the API.
- Utilized users' historical data to improve the relevance of the API's responses, including city name and date prediction for vague or incomplete queries.
- Conduct testing with performance metrics such as precision and recall. Utilized Azure DevOps for deployment with CI/CD.

## Projects

### University Marketplace - Course final project

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.
- Utilized Angular and Material UI to create a responsive, user-friendly single-page application. Used Storybook to develop components and create documentation.
- Used Google Cloud Vision AI to enable automated products categorization using product images. Improved search and recommendation functionality using 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.
- 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.
- Contributed to UI enhancements and bug fixes using Java Swing GUI toolkit.

### University Event Scheduler - Course final project

React

Express

PostgreSQL

Jan 2021 - Apr 2021

- Implemented front-end and back-end with events and venues creation, comments, time conflict detection, and email notification features. Used Jest and Enzyme to conduct React unit testing.
- Integrated Mapbox API to create an interactive map displaying available campus venues using React Map GL, and created dynamic forms for events 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, HTML/CSS.

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

Database SQL, MongoDB