

Jonathan Wang

jonathanwang.jb@gmail.com | linkedin.com/in/you-chun-wang

EDUCATION

University of Illinois at Urbana-Champaign

August 2024 - Present

Master of Computer Science

Course Assistant: CS 411 - Database Systems

Certifications: AWS Certified Cloud Practitioner | Illinois Leadership Certificate

University of Illinois at Urbana-Champaign

August 2020 - May 2024

B.S. in Computer Science & Mathematics | Minor in Statistics

GPA: 3.98/4.00

Awards: Campus Honor - James Scholar Program | Graduated with Highest Distinction | Dean's List

SKILLS

- **Programming Languages:** Python, Golang, C/C++, Java, JavaScript, HTML/CSS, R, MatLab, SQL
- **Full Stack Development:** React, Node.js, Express, Flask, MySQL, MongoDB, Neo4j, Bootstrap
- **Data Science & Machine Learning:** TensorFlow, PyTorch, Scikit-Learn, NumPy, SciPy, pandas
- **DevOps & Cloud Platforms:** Docker, Google Cloud Platform, Amazon Web Services
- **Development Tools:** Git, Bash, Linux, VS Code, IntelliJ IDEA, WordPress

EXPERIENCES

PeopleWeave Project - Caesar Research Group

September 2023 - May 2024

Undergraduate Researcher

Champaign, IL

- Developed an interactive coauthorship network frontend intended for SIGCOMM using React.
- Designed and deployed a large graph database with over 100k relationships using Neo4j.
- Preprocessed raw data entries and implemented graph algorithms to support searching functionalities.

ATLAS - College of Liberal Arts & Sciences

August 2022 - January 2023

Web Development Intern

Champaign, IL

- Revised website to enhance user experiences and aesthetics using JavaScript, HTML, and CSS.
- Applied new functionalities and maintained faculty websites using JavaScript and WordPress.

PROJECTS

Distributed Transaction System | Go

- Developed a program that simultaneously supported concurrent transactions from multiple clients to distributed servers while ensuring ACID properties across all servers.
- Resolved deadlocks and handled rollbacks using timestamped concurrency control.

Airbnb Review Website | React, Node.js, Express, MongoDB

- Created a full-stack web application with Express as REST API and React as frontend.
- Engineered a simple display of Airbnb that supported advanced queries using Bootstrap.
- Implemented login functionality and CRUD to allow searching and changing reviews.

YouTube Trending Query System | JavaScript, Node.js, Express, MySQL

- Built a web application with Express serving as REST API and JavaScript as frontend.
- Designed and hosted a MySQL database on Google Cloud Platform with 10000+ entries.
- Supported query and CRUD functionalities that performed updates to the cloud database.

Discord Bot | Python, MongoDB

- Deployed an interactive discord bot that played a mathematical game called nim.
- Trained the model using reinforcement learning and stored the match records in the database.