Jonathan Wang

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EDUCATION

University of Illinois at Urbana-Champaign

August 2024 - Present

Master of Computer Science

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

Certifications: AWS Certified Cloud Practitioner | Illinois Leadership Certificate

Course Assistant: CS 411 - Database Systems

EXPERIENCES

PeopleWeave Project - Caesar Research Group

September 2023 - May 2024

Undergraduate Researcher

Champaign, IL

- Developed an interactive coauthorship network frontend using React and visualizing libraries.
- Designed and deployed a large graph database using Neo4j with over 100k relationships.
- 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

- Redesigned spotlight page for ATLAS website using HTML/CSS and WordPress.
- Added new functionalities and updated faculty websites using HTML/CSS and WordPress.

PROJECTS

Personal Website | React

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

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

Distributed Transaction System | Go

- Developed a program that simultaneously supported concurrent transactions(read & write) from multiple clients to distributed servers while ensuring ACID properties across all servers.
- Implemented timestamped concurrency control to resolve deadlocks and handled rollbacks.

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

- Developed 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

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

SKILLS

- Programming Languages: Python, Go, C/C++, Java, JavaScript, HTML/CSS, R, MatLab
- Frameworks: Node.js, Express, Flask, Bootstrap
- Database: MySQL, MongoDB, Neo4J
- Developer Tools: Git, Google Cloud Platform, AWS, Unix/Linux, Docker, VS Code, IntelliJ, WordPress
- Libraries: React, TensorFlow, PyTorch, Scikit-Learn, NumPy, SciPy, pandas, matplotlib