# Yug Vajani

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#### **EDUCATION**

# University of Illinois Urbana-Champaign

Champaign, Illinois

Master of Computer Science (GPA: 4.00/4.00)

August 2024- December 2025

Relevant Coursework – Topics in Software Engineering, Machine Learning, Art of Web Programming

#### Sardar Patel Institute of Technology, Mumbai

Mumbai, India

Bachelor of Technology, Computer Engineering (CGPA: 9.72/10.00)

August 2018- May 2022

Relevant Coursework – Database System, Advanced Data Structures, Object Oriented Programming

#### **EXPERIENCE**

# University of Illinois Urbana-Champaign

Champaign, Illinois

Graduate Teaching Assistant

January 2025- Present

- Assisted students in understanding software engineering principles, including design patterns, testing, and agile development.
- Reviewed and graded coding assignments, ensuring adherence to best practices.
- Conducted office hours to support students in debugging and improving software projects.

#### J.P.Morgan Chase & Co.

Mumbai, India

Software Engineer II

January 2024- July 2024

- Enhanced frontend features, improving application performance by 35%, reducing client delays during trade placements.
- Set up infrastructure for disaster recovery, high availability, and failover mechanisms to ensure server reliability.
- Developed automation scripts, reducing manual testing efforts and decreasing production bugs.

Software Engineer I

August 2022- December 2023

- Utilized RxJS and Redux for state management and front-end integration with the server.
- Implemented socket-based data streaming, enabling server to handle 20,000 concurrent requests using multithreading.
- Performed backend service testing with JUnit, ensuring robust and reliable functionality.

## **Prime Software Solutions**

Mumbai, India

Software Developer Intern

December 2021 - February 2022

- Established an efficient GST Tax Automation System using Agile methodologies to adapt to changing GST rules.
- Optimized MySQL queries, reducing execution time and database load, enhancing system performance.
- Overhauled API connections by removing outdated endpoints and improving response times by 15%.

### **PROJECTS**

## Reducing Gender and Ethnicity Bias in Personality Trait Prediction | Python, Computer Vision

Mumbai, India

- Designed a website to streamline recruitment by predicting candidates' personality traits during screening.
- Generated detailed analyses of personality traits for early-stage candidate filtering based on resumes and evaluation scores.
- Used Adversarial Debiasing techniques to mitigate bias, achieving 89.4% 91.3% accuracy. Published paper: IEEE Xplore.

# **Automated Paper Evaluation System** | Flutter, Computer Vision

Mumbai, India

- Developed an application to automate the grading of handwritten student assessments, providing scores with detailed breakdowns.
- Extracted text using the Google Vision API and conducted spell-checking with SymSpell.
- Applied the Rake Algorithm and cosine similarity for analysis. Published a paper: <u>IEEE Xplore</u>.

## **SKILLS**

Languages: Python, Java, JavaScript, Typescript, SQL, C

Databases / Cloud: MongoDB, Cloud Firestore, MySQL, Firebase, SQLite3, AWS, GCP

Frameworks / Technologies: React, Redux, RxJS, Jest, Spring, Django, Flask, JUnit, Figma, CSS, HTML, Agile

Tools: Git, Kaggle, OpenCV, Tableau, Excel, Selenium, Docker, Linux

#### EXTRA CURRICULARS

- Certifications: AWS Cloud Practitioner
- Code for Good Team, J.P. Morgan Chase & Co. Orchestrated a global CFG Hackathon, which also served as a college student recruitment process.
- Events Team, CSI, Sardar Patel Institute of Technology Led technical workshops and participated in organizing a global-level CSI Hackathon.