# Ashriel Nhembo

Email:ashrielnhembo.dev@gmail.comLeetcode: hatch\_cast\_77LinkedIn: ashriel-nhembo-1b5b2a205Github: github.com/nashrielPortfolio: portfolio-3-d-ashen.vercel.appCodechef: hatch\_cast\_77

#### SUMMARY

Self-motivated and technically skilled Computer Science student with a focus on Python development, Artificial Intelligence, and full-stack web technologies. Experienced in building real-world applications using Django, React.js, and Spring Boot through academic projects and simulations. Strong foundation in core CS concepts and a keen interest in developing scalable, intelligent systems. Fast learner with a proactive mindset, ready to contribute to software teams and solve practical challenges.

#### Work Experience

## Software Engineering Virtual Intern – J.P. Morgan Chase & Co. (Forage)

September 2024

- Set up a full local development environment with required tools and dependencies, reducing setup time by **40%** through streamlined configuration. Identified and resolved functional bugs in the frontend codebase, restoring complete application functionality and improving system reliability by **100%**.
- Integrated real-time stock price updates using JPMorgan's proprietary Perspective tool, enhancing user experience and data visibility by 35%. Demonstrated effective collaboration using Git and Agile version control workflows, completing tasks with 100% adherence to sprint timelines.

## SKILLS SUMMARY

- Languages: Python, C, C++, Java, JavaScript, SQL, HTML5, CSS
- Frameworks & Libraries: React.js, Vue.js, Node.js, Express.js, Django, Flask, Spring Boot, Bootstrap, Tailwind CSS, NumPy, Pandas, Matplotlib, TensorFlow, PyTorch, Scikit-Learn
- Databases: MongoDB, MySQL, PostgreSQL
- Tools & Technologies: Git, GitHub, Postman, RESTful APIs, Microsoft Office, Visual Studio Code, Version Control
- Platforms & Cloud: Windows, Linux, Web, Microsoft Azure

## **EDUCATION**

Parul University, Vadodara, Gujarat, India

Bachelor of Technology in Computer Science and Engineering ~ Artificial Intelligence | \* Expected Graduation: Nov 2026

**GPA:** (7.34 / 10)

 Relevant Courses: Data Structures and Algorithms, Operating Systems, Web application development, Machine Learning, AI and Data Science.

# **PROJECTS**

- Axi: Artificial Expense Intelligence Tracker (Full Stack Project | AI + OCR + FinTech)
  - Developed a smart expense-tracking web app using **Django**, **HTML/CSS**, **JavaScript**, and **Bootstrap** to help users manage personal finances with automated insights.
  - Integrated OCR (Optical Character Recognition) using Tesseract and OCR to extract and categorize expenses from uploaded receipts in real-time
  - Implemented JWT-based user authentication, dashboard analytics, and monthly expenditure summaries with customizable views.
  - Utilized **SQL** with **SQLAlchemy** for efficient database management and data persistence.
  - Tech Stack: Django, HTML/CSS, JavaScript, Bootstrap, SQL, SQLAlchemy, OCR, JWT, Tailwind CSS
- Metro-App: Live Metro Route & Schedule Viewer (IoT + Java + Frontend Integration)
  - Built a real-time metro route viewer and schedule planner using Java (Spring Boot) for backend logic and HTML/CSS/JavaScript for frontend integration.
  - Implemented Dijkstra's Algorithm for shortest path route planning and real-time travel time estimations.
  - Integrated Google Maps API for geolocation-based services and map rendering.
  - Focused on clean UI/UX design, responsive layouts, and seamless RESTful API integration.
  - Tech Stack: Java (Spring Boot), JavaScript, HTML/CSS, Google Maps API, Dijkstra's Algorithm, REST API
- CS50 AI Mini Projects (Coursework: Harvard's CS50 Introduction to AI with Python)
  - Completed hands-on mini projects applying core AI concepts like search algorithms, constraint satisfaction, and machine learning using Python. Projects included:
    - Degrees of Separation: Used BFS to compute the shortest connection paths between actors.
    - Knights Problem: Solved a constraint satisfaction problem to place knights on a chessboard without conflicts.
    - Pathfinding: Implemented various pathfinding algorithms (e.g., A search\*) to optimize route navigation in grids.
  - Focused on algorithmic problem-solving, data handling, and Python-based AI techniques & algorithms like A\* search, BFS, Minimax, etc.

## ACHIEVEMENTS AND CERTIFICATIONS

- 100+ DSA problems solved across multiple platforms including GFG, Leetcode, HackerRank etc. for strengthening problem-solving skills and algorithmic thinking.
- CS50's Introduction to Artificial Intelligence with Python (Harvard University Online Course)
  Gained hands-on experience in AI algorithms, search problems, and machine learning through Python.
- Other Certifications