

# UJWAL JOSHI

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## Education

### University of Houston

Expected December 2024

Bachelor of Science in Computer Science, Minor in Mathematics

GPA: 3.66

Awards

Dean's List (Fall 2021, Spring 2023, Fall 2023, Spring 2024), Dean's Distinguished List (Spring 2022)

Relevant Coursework

Database Systems, Machine Learning, Data Science, Data Structures, Algorithms, Operating Systems

## Experience

### The Boeing Company

June 2024 – August 2024

Software Engineer Intern

Denver, CO

- Worked collaboratively with a **10**-member team of Software and DevOps engineers.
- Automated navigation data analysis tools with shell scripts, reducing manual processing time by **80%**.
- Enhanced flight message data validation with Python, improving readability and boosting validation accuracy by **25%**.
- Integrated data validation into a CI/CD pipeline and Docker, reducing deployment errors by **40%** through user-friendly test result displays.

## Projects

### chatAIr | Amadeus, RapidAPI, ExpressJS, React Native

February 2024

- Developed a mobile application with React Native which simplifies flight ticket price searches, earning first-place out of **20 teams** for innovation and accessibility in the PROS company track at the CodeRED Genesis hackathon.
- Integrated APIs from Amadeus and Rapid API, improving data retrieval speeds by **40%**, leading to faster and accessible flight search results for users.
- Utilized advanced Natural Language Processing techniques to accurately interpret user queries, resulting in a significant **30%** increase in the efficiency of retrieving relevant flight information customized to their specifications.

### Traffic Volume Trends Machine Learning Model | R

December 2023

- Conducted comprehensive analysis of interstate traffic, identifying and quantifying key factors pivotal to traffic volume.
- Leveraged advanced statistical models, such as linear regression and random forests, resulting in a **50%** enhancement in predictive model accuracy.
- Implemented advanced data cleaning and analysis techniques, leading to a **40%** reduction in prediction errors.

### Fluid Dynamics Serial Receiver | Java, C++

April 2020

- Collaborated a team of **2** to create a desktop application for collecting and displaying data from fluid samples.
- Developed a Java Swing application to display the output of **3** sensors detecting chemical content in fluid samples.
- Implemented a CSV file exporter for data to be analyzed in programs like Excel reducing data processing time by **20%**

## Technical Skills

Languages: Python, R, Java, C++, HTML/CSS, JavaScript/Typescript, SQL

Technologies/Frameworks: Linux, ReactJS, SvelteKit, TailwindCSS, Pandas, NumPy, PostgreSQL, MongoDB

## Involvement and Leadership

### CougarCS

August 2023 – Present

Computer Science Tutor

Houston, Texas

- Guided **11+** students on coding assignments, projects, and lab exercises on a **weekly basis**.
- Increased student exam scores by an average of **12%** by collaborating with a team of **30** tutors to centrally plan customized lesson plans.
- Conducted one-on-one and group tutoring sessions for students enrolled in Computer Science courses such as Data Structures.