

SHUBHAYAN SRIVASTAVA

GitHub: github.com/shubhayan935 | 213-910-4667 | shubhaya@usc.edu | [linkedin.com/shubhayan935](https://www.linkedin.com/shubhayan935)

EDUCATION

University of Southern California
Computer Science, Bachelor of Science

Los Angeles, California
August 2023-December 2026

PROJECTS

Movie Database Website

January 2024

- Created a personal Movies Site project to showcase comprehensive web development and database management skills
- Integrated MongoDB to store and manage user reviews, contributing to an engaging movie exploration experience
- Designed and executed a responsive and visually appealing user interface using HTML, CSS, and JavaScript. Leveraged MongoDB for efficient data storage and retrieval, allowing users to submit and explore dynamic reviews
- Demonstrated full-stack development proficiency, creating a feature-rich Movies Site and combining front-end design with MongoDB-backed user reviews for an immersive and interactive platform

Free Online Question Bank for Past Paper, CS for Social Good

October 2021-June 2023

- Collaborated with a team of 11 to build a web application to enhance education services
- Spearheaded development of an NLP based summarization tool with React.js and deployed it to AWS with Django
- Developed an online question bank from past-papers users can filter based on subject, topic, and year, along with detailed answers using PDF-OCR and Pattern Recognition techniques in Python
- Merged project with blitznotes.org, an online education service with a database of notes for numerous high school subjects and 20,000+ users across 145 countries, to expand reach of educational tools

Air Pollution Analysis, Karnataka Pollution Control Board

September 2021-March 2023

- Leveraged a Machine Learning-based approach to optimize implementation of air quality improvement methods
- Fine-tuned and executed Forecasting models (Box-Jenkins, Trend Projections and X-11) to predict the Air Quality Index with changes in air pollutant levels within short, medium and long term impacts, accounting for 30+ air pollutants
- Developed a user-friendly dashboard using Tableau, making it easier for all to use model and implement its results

EXPERIENCE

USC Formula Electric

Los Angeles, California

Data Analytics Center Lead

September 2023-Present

- Lead a team of five individuals, collecting and analyzing data from performance tests of individual automotive components to improve overall vehicular performance
- Deploy the Dashboard Display, using C++, with the Vehicle Control Unit via encoding and decoding through microcontrollers

USC Annenberg Media

Los Angeles, California

Full-Stack Software Developer

September 2023-December 2023

- Collaborated with a team of 20 developers on optimizing user experience and improve efficiency of media search capabilities, including but not limited to audio and video media content
- Conducted in-depth performance analysis and identified bottlenecks in media search algorithms and implemented Hash Table and Rabin-Karp algorithms, reducing search times by up to 40%
- Developed real-time news updating features with asynchronous JavaScript and XML while working closely with UI/UX designers

TECHNICAL SKILLS

- Programming Languages: Python, JavaScript, CSS, C++, Swift
- AI ML/Data Science: Pandas, PySpark, Plotly, FB Prophet, Seaborn, Matplotlib, Numpy, Scipy, Scikit-learn, TensorFlow
- Development: ReactJS, NodeJS, Django, Redux, Flask, Bootstrap, REST API
- Tools: Git, MS Excel, Firebase, Heroku, AWS, GCP, Linux Command Line, Data Mining, SQL, GPT3, Embedded Programming, Automotive Electronics, Pattern Recognition, Tableau

LEADERSHIP EXPERIENCE

Robotics Club, The International School Bangalore
Founder, President

Bengaluru, India
August 2021-March 2023

TISB Model United Nations
Deputy Director General

Bengaluru, India
January 2022-December 2022