

Experience

Software Engineering Intern, Oriole Labs ([Internship Certificate](#))

Oct 2023 – Jun 2024

- Developed interactive analytical dashboards from scratch for the company's HR management SaaS platform, enhancing data visualization, user engagement, and overall usability.
- Built advanced ETL workflows and implemented robust backend services (including SQL stored procedures), optimizing data handling, accelerating analytics, and enabling seamless API integration.
- Implemented custom click-event functionalities within dashboards for hierarchical data exploration, empowering deeper analytical insights and granular data drill-down.
- Researched and prototyped an offline face-recognition system using open-source models (FaceNet, MobileFaceNet); achieved a 72% model size reduction via post-training quantization, reducing internet dependency for attendance verification.
- Tools & Technologies: Python, FastAPI, Pandas, JavaScript, HTML, Bootstrap, Plotly.js, SQL Server

Technical Head, Forengers Foundation (NGO)

Mar 2024 - Present

- Supervise Tech Team projects, including [website](#) maintenance, development of new website features and sensitive automation, to ensure code integrity, data security, and feature development.
- Developed and maintained Google Apps Script code to automate file access management to manage access of 100+ users, increasing data safety and compliance across multiple google drives.
- Currently working on in-house implementations of - certification and online validation system; lossy compression of our content library using AV1 and h265 encoding; electronic signatures and their encrypted storage for efficient handling of our regulation forms.

Education

Sinhgad College of Engineering, Pune (affiliated to SPPU), B.E. in Chemical Engineering

Jun 2018 – May 2022

- CGPA: 8.78/10 ([Transcripts](#))

Dr. Kalmadi Shamrao Junior College, Higher Secondary Certificate (Maharashtra State Board)

Jul 2016 – May 2018

- Overall score - 75.54%, Maths - 100/100 ([Passing Certificate/Marksheet](#))

Certifications and Licenses

Advanced Certificate in Data Science and AI, from IIT-Madras and IntelliPaat ([View Credential](#))

Mar 2024 - Present

Projects

A Zero-backend House Price Prediction and Recommendation Web-app (Ongoing)

[Website](#) | [GitHub](#)

- Developed an end-to-end ML system for Pune house price prediction (LightGBM, $R^2 \approx 0.93$, Median APE $\approx 11\%$) and recommendation using 30k+ scraped listings.
- Performed comprehensive data preparation: Selenium scraping, advanced preprocessing, and rigorous feature selection.
- Engineered two distinct deployment architectures: 1) A robust, containerized FastAPI backend (Docker, AWS EC2, Nginx) for server-side ML. 2) A client-side system leveraging ONNX for efficient in-browser inference.
- Delivered a responsive Astro/React frontend (Vercel) with CI/CD, executing all ML inference client-side (ONNX models).
- Tools & Tech: Python, Pandas, Scikit-learn, LightGBM, ONNX, JavaScript, FastAPI, Docker, AWS EC2, Nginx, Selenium, Astro.js, React, Vercel

Karnataka Elections Data Analysis

[Website](#) | [GitHub](#)

- Built a robust data pipeline using web scraping (Requests, BeautifulSoup, Selenium) and PDF extraction (PyPDF2, TesseractOCR) to process more than 57k PDFs.
- Reduced costs by 50% with OpenAI's Batch API (GPT-4o-mini) instead of the Real-time API for segmenting and categorizing candidate data (education, profession, etc.).
- Developed interactive plots (Plotly.js, Flourish Studio) with detailed analysis revealing vote counts, margins, and many more insights, then deployed them on AWS EC2 with NGINX for smooth delivery.
- Tools & Tech used: Python, Pandas, Selenium, PyPDF2, TesseractOCR, OpenAI Batch API, Plotly.js, AWS EC2, NGINX, HTML, JavaScript.

Walmart Sales Analysis and Forecasting

[Website](#) | [GitHub](#)

- Performed in-depth exploratory data analysis on a Walmart weekly sales dataset, uncovering key trends, seasonal patterns, and outliers using robust statistical and visualization techniques.
- Developed and validated forecasting models to predict future weekly sales, leveraging historical data to enhance decision-making.
- Tools and Technologies: Python, Jupyter Notebooks, Pandas, NumPy, Seaborn, Vercel

Skills

Programming Languages: Python, SQL, JavaScript, C++

Frameworks & Libraries: FastAPI, React, Astro, Pandas, Scikit-learn, Plotly.js, Selenium

Tools & Platforms: Docker, AWS EC2, Git, SQL Server, Nginx, Vercel

Awards and Achievements

Maths Topper (2018): Awarded by the college for scoring a perfect 100/100 in Mathematics in the HSC Class 12 exams.