

WORK EXPERIENCE

Software Development Intern / Turabit LLC

May 2024 - Present

- Identified requirements and proposed effective alternative solutions during the internship period.
- Gained hands-on experience in **Python, Django, Flask**, and **FastAPI**-based projects.
- Created project **APIs** and applied **Object-Oriented Programming (OOP)** principles in development.
- Utilized frameworks and tools such as **Flask, API**, and **Flask REST** for building scalable applications.
- Developed skills in **web socket programming** for real-time communication systems.
- Designed web and software applications using **HTML, CSS, Bootstrap**, and **JavaScript**.
- Debugged code and managed deployment from development to **PyCharm** environment.
- Applied fundamental Machine Learning techniques for data analysis and model building.
- Worked on data preprocessing, feature engineering, and model evaluation processes.
- Utilized Python libraries such as Sci-kit-learn and pandas for ML model development.

PROJECTS

Cake Shop / Python, Flask, REST API, MySQL

Jun 2024 - Aug 2024

- Developed a **web-based bakery management** application to manage product listings, customer orders, and inventory control.
- Designed and implemented **RESTful APIs** for product management, order placement, and order tracking.
- Integrated **SQLAlchemy with MySQL** for database modeling, transactions, and real-time data synchronization.
- Implemented **user authentication and role-based access control** to secure the admin and customer functionalities.
- Created API endpoints for **product search, filtering, and viewing order history** to enhance customer experience.
- Optimized database performance by adding **indexes** on frequently queried columns.
- Integrated **error handling and standardized API responses** for improved usability and debugging.
- Documented all API endpoints using **Swagger** to facilitate collaboration and testing.

Real-Time Chat Application / Python, Flask, REST API, Redis, WebSocket, MySQL, GitHub

Sept 2024 - Nov 2024

- Developed a **real-time chat application** supporting instant messaging, live updates, and user authentication.
- Designed and implemented **RESTful APIs** and integrated **WebSocket** for seamless two-way communication between users.
- Utilized **Redis** for message queuing and real-time delivery, ensuring fast and reliable message transmission.
- Implemented user presence tracking and typing indicators to enhance real-time interactivity.
- Designed a scalable **MySQL database schema** to manage user profiles, chat history, and session data.
- Deployed the application on a cloud server for demonstration, ensuring accessibility and performance under concurrent usage.
- Collaborated with the team during internship to enhance features, manage version control via **GitHub**, and address technical challenges.

PDF Text Extraction and Validation / Python, PyPDF2, pdfplumber, Tesseract OCR, SpaCy, Matplotlib

Dec 2024 - Jan 2025

- Built an **automated text extraction system** from PDFs using PyPDF2, pdfplumber, and Tesseract OCR for scanned documents.
- Developed robust **parsing logic** to preserve original PDF structures including headings, paragraphs, and tables.
- Applied **NLP techniques** like tokenization and Named Entity Recognition (NER) using SpaCy to validate content accuracy and detect anomalies.
- Designed **automated consistency checks** to compare extracted text against expected patterns and structured templates.
- Created scripts for **comparing structured vs. unstructured data** to identify formatting issues and missing content.
- Visualized **inconsistencies and missing sections** in extracted text using Matplotlib and Seaborn for quick diagnosis.
- Automated **quality checks** with threshold-based flagging of extraction errors to ensure reliability in downstream processing.

SKILLS

Languages	Python, SQL
Frameworks/Tools	Django, Flask, Rest, Pandas, Matplotlib, Numpy, Tensorflow, Keras
Databases	PostgreSQL
Other Skills	Websocket , Machine Learning

EDUCATION

BCA , Sarvodaya College of Science and Technology - Rajkot , CGPA: 7.56/10

Aug 2021 — Mar 2024