

Oswin Alex

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EDUCATION

Bachelor of Engineering in Information Technology

- Institution: Don Bosco Institute of Technology, Mumbai
- GPA: 7.24

Diploma in Electronics and Telecommunication Engineering

- Institution: Xaviers Technical Institute, Mumbai
- Percentage: 74.03%

EXPERIENCE

Department of Information Technology, DBIT

Sept. 2023 – Aug. 2024

Web Developer and Maintainer

Mumbai, IN

- Development, maintenance, and performance optimization of the institution's website.
- Implemented performance optimization, resulting in **20-30% faster load times**.
- Tech Stack: **HTML, CSS, JavaScript**.

AICTE, Alteryx Virtual Data Analytics Internship

April 2024 – June 2024

Data Analytics Intern

Remote, IN

- Gained hands-on experience with data analytics tools and techniques.
- Enhanced proficiency in data analysis processes and methodologies.

Wadhwani Foundation, AICTE

Jan 2024

IDE Bootcamp

Nagpur

- Participated in an advanced bootcamp focusing on integrated development environments (IDE).
- Enhanced skills in various IDEs and their application in real-world development scenarios.
- Worked on collaborative coding projects and hands-on problem-solving tasks.

PROJECTS

Centralized Nasha Mukti System

- Developed a web application to manage addiction rehabilitation centers using a centralized system
- Integrated a **role-based access control (RBAC)** model for secure user access management
- Implemented **CRUD operations** for managing patient records, appointments, and schedules
- Utilized the **Leaflet.js library** to display nearby addiction recovery centers on a map
- Implemented **Blowfish Cipher encryption** to securely store sensitive data such as patient information
- Tech stack: **React.js, Node.js, Express.js, MongoDB, TypeScript**

Mobile Application for Addiction Recovery

- Designed and developed a mobile app to assist addiction patients in their recovery journey
- Enabled users to search for and book appointments at nearby rehab centers while tracking recovery milestones and progress via a personalized timeline
- Tech stack: **Flutter**

Data Analysis and Prediction on Drug Addicts

- Predicted recovery time of drug-addicted patients by analyzing various factors using supervised learning algorithms
- Gained insights and patterns in the recovery process and drug usage across different demographics
- Tech stack: **Pandas, NumPy, Scikit-learn, Matplotlib**

Truck Logistics Website

- Developed a web application allowing users to book trucks based on their preferences such as price and loading capacity
- Integrated the **Mapbox API** to calculate the distance and total cost between pickup and delivery locations
- Utilized a **MongoDB** database to store truck details, user information, and booking history
- Tech stack: **MongoDB, Node.js, Express.js, React.js, Mapbox API**

IoT-Based Smart Blind Stick

- Developed a smart stick equipped with **ultrasonic sensors** to detect obstacles and provide feedback to the user.
- Integrated an **emergency button** to send an SMS with the user's **current location** to a designated caretaker.
- Implemented **live tracking** on a web platform using **WebSocket protocol** and **Leaflet.js**.
- Utilized hardware components like **GSM module, GPS module, NodeMCU**, and **ultrasonic sensors**.
- Tech stack: **Express.js, Node.js, React.js, MongoDB, Leaflet.js, WebSocket protocol**

Email Spam Classifier

- Built a machine learning model to classify emails as spam or non-spam using text data.
- Processed and analyzed datasets using **pandas** and **numpy** for feature extraction and cleaning.
- Implemented algorithms like **Naïve Bayes** and **SVM** using **scikit-learn** to train the classifier.
- Achieved high accuracy by employing **TF-IDF vectorization** for text representation.
- Evaluated model performance using metrics such as **precision, recall**, and **F1 score**.
- Tech stack: **Python, pandas, numpy, scikit-learn**

SKILLS

Languages : Java ,Python, JavaScript

Databases : MySql , MongoDB

Frameworks : React js, Node js, Express js, Flutter

Tools : Git, Docker, Jenkins, AWS, postman, Wireshark

ACHIEVEMENTS

Winner, Smart India Hackathon 2023

- Problem statement SIH1366: Centralized System for De-addiction Centers.

Finalist, Yukti Startup Innovation Challenge 2024

- Developed a Centralized System for De-addiction Centers as part of the innovation challenge.