Sujal Sanjay Dubey

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Education

- **Vishwakarma Institute of Technology** — Pune, Maharashtra, India
  Bachelor of Technology - Computer Science and Engineering (AIML); CGPA: 7.89 — *Aug 2023 - May 2026*
  Courses: *Operating Systems, Data Structures, Analysis of Algorithms, Artificial Intelligence, Machine Learning, Computer Networks, DBMS, Internet of Things*

- **Jayawantrao Sawant Polytechnic** — Pune, Maharashtra, India
  Diploma - Computer Engineering; CGPA: 9.7 — *Aug 2020 - May 2023*
  Courses: *Operating Systems, Data Structures, Computer Networks, DBMS, Mobile App Development, Software Engineering, Programming Languages - C++, Python, Java*

Skills Summary

- **Languages**: C++, Java, SQL, Python
- **Problem Solving**: Using C++ (Platform - LeetCode, GeeksforGeeks, Codechef)
- **Frameworks**: Scikit, TensorFlow, Keras, Data Modeling
- **Tools**: Android Studio, Git, PyCharm, MySQL, Arduino IDE
- **Platforms**: Linux, Windows
- **Soft Skills**: Leadership, Able to Thrive in Rapidly Changing Situations, Event Management, Writing, Public Speaking, Time Management

Projects

- **SpyCam Android App (Java, Android SDK)**: The SpyCam app is a discreet solution for users who need to capture photos or videos without drawing attention. This Android application allows users to select between the front or back camera, set the number of photos to be taken, and configure a buffer time for delayed operation. The app runs silently in the background, ensuring that users can capture media without interruptions or notifications. It's ideal for situations where discretion is paramount, offering a reliable and user-friendly interface. (Mar '23)
- **BrailleTextify (OpenCV, MediaPipe, TensorFlow, CNN, Android)**: This project aims to revolutionize accessibility for visually impaired individuals by converting Braille text into speech in real-time. Utilizing machine learning and advanced image processing techniques, BrailleTextify offers a user-friendly Android interface that reads Braille and provides audio feedback, enabling visually impaired users to access printed materials independently. The system's robustness allows it to handle variations in Braille text and environmental factors, making it a reliable tool for daily use. (May '24)
- **Devnagari Sign Language Recognition System (OpenCV, MediaPipe, TensorFlow, CNN, Data Preprocessing)**: This project focuses on bridging the communication gap for the hearing impaired by leveraging computer vision and machine learning to accurately recognize Devanagari sign gestures. The system is designed to be web-based, providing users with real-time gesture interpretation that is both reliable and precise. It involves extensive data preprocessing and the implementation of a Convolutional Neural Network (CNN) to ensure the system's effectiveness in diverse lighting conditions and backgrounds. (Jan '24)
- **Blog Generation (LLM, Natural Language Processing)**: This project focuses on automating the generation of blog content using the LLaMA 2 model, a large language model (LLM). The application is built with Streamlit, allowing users to interactively generate blog posts tailored to different audiences. The tool leverages natural language processing (NLP) to produce coherent and contextually relevant content based on user inputs. (Apr '24)

Publications

- **Paper: Deep Learning for Sign Language Recognition (Computer Vision, Machine Learning)** : A research paper discussing the application of deep learning techniques in sign language recognition systems. The paper covers topics such as computer vision, neural networks, and web-based deployment. (Dec '24)
- **Paper: Real-Time Braille Translation with ML (Machine Learning, Android Development)**: This research paper explores methods for real-time Braille translation using machine learning, with a focus on Android development and the integration of software and hardware components. (Feb '25)

Honors and Awards

- Best Outgoing Student for Academic Year 22-23: Awarded for overall academic excellence and outstanding performance throughout the academic year. (Mar '23)
- Ranked 2nd out of 180 Students: Achieved second place in the year 2023. (Sep '23)

Certifications

- Fundamentals of Deep Learning by Nvidia. (Feb '24)
- Career Essentials in Software Development by Microsoft and LinkedIn. (Feb '24)
- Artificial Intelligence Foundations: Machine Learning. (Mar '24)
- Advanced Design Patterns: Design Principles. (Mar '24)
- Certificate of Participation in Flipkart Grid 6.0 - Software Development Track. (Jun '24)
- Certificate of Participation in Flipkart Grid 6.0 - Information Security Challenge. (Jun '24)
- Certificate of Participation in SUSTAIN-A-THON 2024. (Jun '24)
- Certificate of Participation in Case Study Competition by NationBuilding. (Feb '24)
- Certificate of Participation (Top 25 Projects out of 140) in INNOVATION EXPO 2024 at VIT, Pune. (Mar '24)