

Sanskar Ranwa

snskrnwa@gmail.com | linkedin.com/in/SanskarRanwa | github.com/SanskarRanwa |

EDUCATION

VIT Bhopal University

Bachelor of Technology in Computer Science Engineering

CGPA: 8.1/10

Bhopal, India

July 2022 – Present

Jayshree Periwal High School

Class XII

Percentage: 76.0%

Jaipur, India

May 2021

Nosegay Public School

Class X

Percentage: 81.0%

Rajasthan, India

May 2019

PROJECTS

Conversational PDF Analysis Tool | *Python, LangChain, Streamlit, Hugging Face*

September 2025

- Engineered an **end-to-end RAG pipeline** with Python & LangChain, deploying open-source Hugging Face models for **100% local processing** to ensure data privacy. Implemented a **history-aware chain** to enable conversational memory and enforced strict, document-grounded responses via prompt engineering.
- Developed a **Streamlit** web app and optimized the RAG chain by limiting context to the top 3 document chunks, resolving a critical **512-token model limitation**. [GitHub]

AI Assistant App | *Flutter, OpenAI API, Google Gemini, AppWrite*

August 2025

- Engineered a comprehensive mobile assistant by integrating multiple third-party AI services, including **OpenAI (GPT)** for chat and image generation, and **Google (Gemini, Translator)** for advanced conversational AI and multi-language support.
- Developed a modern, responsive UI with **Flutter**, featuring custom animations, a dynamic light/dark mode, and a seamless user onboarding flow, all supported by an **AppWrite** cloud backend for data management.[GitHub]

Book Recommender | *Python, Scikit-learn, Pandas, NumPy, K-Means Clustering*

July 2025

- Developed a content-based recommender by applying **K-Means clustering** to a dataset of over **8,000** books, grouping them by genre, author, and metadata.
- Engineered features and optimized the clustering algorithm to generate **6–10** highly relevant recommendations, ensuring **100%** meaningful results for users.[GitHub]

Tumour Detection Model | *Python, TensorFlow, Keras, CNN*

June 2025

- Designed and implemented a deep Convolutional Neural Network (CNN) based on the **Inception Model architecture** using Python, TensorFlow, and Keras for advanced medical image analysis.
- Trained the model on **20,000+ medical images**, achieving **95%** diagnostic accuracy.[GitHub]

TECHNICAL SKILLS

Languages: Python, SQL, Java

Frameworks/Libraries: : Pandas, SQL, MongoDB, Scikit-learn, TensorFlow, Keras, Pandas, NumPy, LangChain

Tools: Jupyter Notebook, BigQuery, Git, Power BI, Tableau, Excel

Certifications: NPTEL, Bits and Bytes of Computer Networking (Google, 2024), AWS Solutions Architect-Associate Certificate Program(2025), Embedded System Design Internship Program(2025)

ACHIEVEMENTS

Led a team to secure **1st Place** in the **2024 Firefox Expedition Programming Competition**, organized by the Firefox Club of VIT Bhopal. **1st Place** at the district-level music competition.

Earned **1st Position** in the **Music Category** at the 2022 Talent Show.

Winner of the **Sargam Singing Competition**, demonstrating excellence in vocal performance in a university-level cultural event.