

SONU ALEX ANTONY

Email: sonualexantony@gmail.com | **Phone:** +91 884-859-5306

Github: <https://github.com/SonuAlex> | **LinkedIn:** www.linkedin.com/in/sonualex/

CORE SKILLS

- **Programming Languages:** C++, Python, Dart
- **AI/ML:** Scikit-Learn, OpenCV, OCR, YOLO, TensorFlow
- **Web Development:** HTML, CSS, JavaScript, React.js, FastAPI
- **Version Control:** Git
- **Databases:** MongoDB, SQL

CERTIFICATES

- Advanced Data Structure and Algorithms with C++ | Iamneo [Jan 2023]
- Applied Machine Learning with Python | Coursera [Feb 2023]
- MERN Full Stack Internship Program | Ethnus [Dec 2023]
- Introduction to Deep Learning | Kaggle [May 2023]

EDUCATION

Vellore Institute of Technology

Bachelor of Technology, Computer Science (CGPA: 8.15/10.00)

Bhopal, Madhya Pradesh

2021-25

PROJECT WORK

AI Community Bookstore | *Python, FastAPI, Firebase, MongoDB, Flutter, Tensorflow* Mar 2024 – May 2024

- Engineered a bookstore that utilizes Artificial Intelligence to identify the book title allowing user to seamlessly add books with an increased accuracy of 72% and a reduced response time of 300ms.
- Utilized multiple libraries including OpenCV, EasyOCR, YOLOv8, BERT extensively in project development.

Facial Recognition Attendance System | *Python, Firebase, OpenCV*

Mar 2024 – May 2024

- Engineered a Facial Recognition Attendance System leveraging Machine Learning to achieve an identification accuracy of 80%, significantly enhancing user attendance tracking.
- Utilized multiple libraries including but not limited to OpenCV and Pillow extensively in project development
- Collaborated effectively with a team of two, utilizing Firebase's real-time database and storage solutions to ensure efficient project completion.

Sentiment Analysis Research Work | *Python, Scikit*

Feb 2024 – May 2024

- Led research efforts on Sentiment Analysis of Twitter Tweets using various Machine Learning models, resulting in accuracy improvements ranging from 25.22% to 61.20%.
- Employed a variety of models, including regression and classification, using tools such as NLTK and techniques like Gradient Boosting, to develop over 10 models.
- Collaborated with a 6 member team to conduct comprehensive research and analysis.

Retrieval-Augmented Generation System: | *Python, MongoDB, FastAPI*

Aug 2024 – Sept 2024

- Developed a Retrieval-Augmented System using Python, MongoDB, FastAPI; also utilizing MongoDB's Atlas Vector Search which improved AI model accuracy by 25% and reduced response time by 40%.
- The system processed over 200 documents, enabling real-time information retrieval and integration during the model's inference process.

ACHIEVEMENTS

- Secured second place in a eight-grade robotics competition organized by RoboRave, specifically excelling in a team of five during the line-following challenge. | Nov, 2017
- Finalist, Smart India Hackathon 2023 Internal Hackathon on Disaster Management by Home Ministry India, with over three hundred teams participated | Nov 2023
- Engaged in over 300 technical programming challenges on top coding platforms.

RESPONSIBILITIES

- As a member of VIT Bhopal's Virtual Reality and Gaming Club, I Managed technical setup for 3 game tournaments with 30 participants each. | Aug 2023 – onwards
- Played an active role in VIT Bhopal's Cooking and Feasting club events by providing support in logistics coordination and data analysis for over 120+ students. | Aug 2023 – onwards