

# ARUN

Bengaluru, Karnataka

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LinkedIn

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LeetCode

## EDUCATION

### Dayananda Sagar College of Engineering, Bengaluru

*B.E. in Computer Science and Engineering (Data Science) — CGPA: 8.08*

2023 – 2026

Bengaluru, Karnataka

### Government Polytechnic College, Bidar

*Diploma in Mechanical Engineering — CGPA: 8.8*

2020 – 2023

Bidar, Karnataka

### Shree Sai Adarsh High School, Bidar

*SSLC — Percentage: 83.04*

2020

Bidar, Karnataka

## PROJECTS

### Phishing Detection System ↗ | JavaScript, ReactJS, Python, Django, SQL, ML, APIs

Aug 2025

- Built a phishing detection platform (React + Django REST) with 95 Percent + model accuracy, supporting secure real-time URL scanning..
- Engineered a robust classifier with XGBoost, integrated Google Safe Browsing and urlscan.io APIs for reliable live threat intelligence.
- Added advanced password strength analysis and a dynamic live attacks dashboard, enhancing transparency and user security awareness.
- Delivered a fully responsive UI for instant ML feedback and seamless cross-device user experience.

### Gesture to Speech Communication System ↗ | CNN,gTTS,Mediapipe,PyTorch,Flask

Feb 2025

- Developed an end-to-end real-time gesture-to-speech system to assist speech-impaired individuals, using standard webcams and a lightweight, deployable architecture.
- Implemented a custom CNN trained on a self-curated dataset with 16 gesture classes.
- Integrated MediaPipe for 21-point hand landmark detection and normalized input for robust classification.
- Mapped recognized gestures to text and synthesized speech using Google Text-to-Speech (gTTS), enabling fluid, real-time interaction through a web interface built with Flask.
- Optimized the system for low-latency, cross-platform usage, eliminating the need for specialized hardware.

### Transformer-Based Image Captioning System ↗ | Transformers, ViT, GPT-2, PyTorch

Nov 2024

- Fine-tuned the ViT-GPT2 transformer model on the Flickr8k dataset to automatically generate accurate, context-aware captions for images.
- Employed a Vision Transformer (ViT) for image patch encoding and GPT-2 for autoregressive caption generation with beam search decoding.
- Built a complete inference pipeline and deployed the model via a Gradio-based interface, supporting real-time image upload and caption display.
- Applied mixed-precision training and optimized preprocessing for faster inference and lower memory consumption, making the system suitable for consumer-grade hardware.

### Hotel Menu Web Pages. ↗ | HTML, CSS, Javascript

OCT 2025

- In this project we did simple 4- 5 web pages and which are interconnected and responsive too .... for hotel menu items selection like making orders in sitting places(from the table only...)
- Responsive: Works well on computer, tablet, and phone.

## TECHNICAL SKILLS

**Languages:** Python, C++

**Database Management:** SQL

**Front-end-development:** HTML,CSS,JAVASCRIPT

**Analytics Visualization:** Power BI, NumPy, Pandas, Matplotlib ,Tableau, Excel

**Machine Learning and NLP :** CNN,RNN,LSTM etc.

**Tools:** VS Code, Git, GitHub Actions

**Course Work:** OOPs, DBMS, Data Structures And Algorithms

**Soft Skills** Problem Solving, Debugging, Communication, Team Leadership, Creative Design Thinking

## CERTIFICATIONS

- NPTEL Online Course (12-week) – Deep Learning for NLP – SWAYAM
- IBM SkillsBuild Project-Based Learning Program – Click, Code, Create: Beginner’s Guide to Front-End Web Development with CSRBOX (July–August 2025)
- Complete Data Structures and Algorithms in C++ — Dr. Love Babbar, CodeHelp