Archana Prasad Nair

Navi Mumbai, Maharashtra

Education

Vellore Institute of Technology, Bhopal

Sep. 2022 – May 2026

Bachelor of Technology in Computer Science; Minor in Cloud Computing and Automation

Bhopal, Madhya Pradesh

CGPA: 9.00/10.00

Technical Skills

• C++

• Java

• Python

• MySQL

• Data Structures

Projects

NomNom Food Ordering Chatbot | FastAPI, MySQL, NLP

June 2025 - June 2025

- Developed an AI-powered food ordering chatbot using Dialogflow for natural language understanding and order processing.
- Implemented backend using FastAPI with MySQL database integration for order tracking and management.
- Built a responsive frontend with order cart functionality and real-time order status updates.

Indian Sign Language Project | MediaPipe, Flask, OpenCV

May 2025 - June 2025

- Executed a real-time ISL (Indian Sign Language) classifier using a Random Forest model trained on hand landmark data, achieving high accuracy in letter prediction.
- Constructed a Flask-based web app to process images and webcam feeds, displaying detected signs with a bounding box visualization.

${\bf Sahay-Disaster~Management~Platform}\mid \mathit{ML},\ \mathit{Flask}$

July 2024 – Apr. 2025

- Engineered a Random Forest Regressor to predict monthly rainfall using historical data (1901-2017), attaining 97.5% R² and 98.5% accuracy.
- Designed data pipelines for preprocessing and visualizing rainfall trends (histograms, line plots) to identify patterns for disaster preparedness.

BlissBloom | NLP, ML

Jan. 2024 – May 2024

- Created an emotion detection website with an ML model trained to identify text emotions, displaying predictions with emoticons and confidence levels via an Altair chart.
- Integrated a personalized recommendation system with mood enhancement suggestions (e.g., exercise, yoga, movies, music).

Leadership

Cloud Zone Club

Feb. 2024 - Present

Design Team Lead

 $VIT\ Bhopal$

• Led "Code Quest" gaming/quiz competition (100+ participants) for AdVITya '24 and '25, handling promotions and operations.

Extracurricular

National Youth Parliament Scheme

April 2024

Finance Minister

VIT Bhopal

• Selected for the Youth Parliament, demonstrated public speaking, leadership, and analytical skills in a simulated parliamentary environment.

Smart India Hackathon

August 2024

PanStamp

 $VIT\ Bhopal$

• Qualified in the Internal Round of Smart India Hackathon 2024 at VIT Bhopal, and was among the waitlisted teams.

Additional

- Languages: English, Hindi, Malayalam, German
- Certifications:
 - * Oracle Certified Professional: Java SE 11 Developer