Archana Prasad Nair

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Education

VIT Bhopal University

Bhopal, Madhya Pradesh Expected May 2026

BTech

Major in Computer Science; Minors in Cloud Computing and Automation

Cumulative GPA: 9.00/10

12th Standard

Jaipuriar School Navi Mumbai, Maharashtra CBSE Percentage: 82%

June 2022

10th Standard

Bal Bharati Public School Navi Mumbai, Maharashtra CBSE Percentage: 89.8%

April 2020

Projects

Emotion detection website and recommendation system

Jan 2024 - May 2024

- Delivered an emotion recognition website, using a machine learning algorithm to interpret emotions from input text, showing results with emoticons and confidence levels via an Altair chart.
- Integrated a personalized recommendation system offering mood enhancement suggestions such as exercise routines, yoga practices, and curated movie and music selections.

Sahay - Disaster Management Platform

July 2024 – April 2025

- Engineered features and trained a Random Forest Regressor to predict monthly rainfall using historical data (1901– 2017), achieving 97.5% R² score and 98.5% accuracy.
- Designed data pipelines for preprocessing and visualizing rainfall trends (histograms, line plots) to identify patterns and anomalies, enabling actionable insights for disaster preparedness.

Sign Language Detection Model

May 2024 – June 2024

- Developed a real-time Indian Sign Language (ISL) classifier using Random Forest, trained on hand landmark data to predict numbers with high accuracy.
- Built a Flask-based web application to process user-uploaded images and live webcam feeds, displaying detected signs with bounding box visualisation for improved accessibility.

Extracurricular

National Youth Parliament Scheme

April 2024

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

Smart India Hackathon August 2024

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

Activities

Cloud Zone Club VIT Bhopal Design Team Lead Feb 2024

• Led the design and execution of "Code Quest," a gaming and quiz competition with over 100 participants, for AdVITya (college tech fest) in both 2024 and 2025, which included creating promotional materials and coordinating event operations.

ADDITIONAL

Technical Skills: Proficient in Python, C++, SQL, JAVA, Problem Solving

Languages: Fluent in English, Hindi; Conversational Proficiency in German and Malayalam

Certifications & Training: Introduction to Data Structures & Algorithms in Java (LinkedIn Learning) - Mar 2023

Online Course in HTML, CSS, and JavaScript for Web Developers (Coursera) - Dec 2023

AWS Cloud Practitioner Essentials (Coursera) - April 2025

Data Science with Python (iamNeo) - April 2025

Java Development on Oracle cloud (Oracle, Course completion certificate)- May 2025