Arnav Bharti

Pursuing Computer Science and Biological Science at BITS Pilani, India

Academic Details

Birla Institute of Technology and Science, Pilani

Graduating 2027

Bachelor of Engineering (Honours) in Computer Science

Pilani, Rajasthan

 $Master\ of\ Science\ in\ Biological\ Science$

Kothari International School, Noida

Apr. 2019 - June 2022

All India Senior School Certificate Examination – 94% All India Secondary School Examination – 98.5% $Noida,\ Uttar\ Pradesh$

Summer Internship / Work Experience

MASTH Life - Ultrahive Healthcare Pvt Ltd

May 2024 - Jul. 2024

 $SDE\ Intern$

Remote

- Implemented backend for multi-tenant authorization and CRUD document management system for a RAG web app.
- Designed and implemented 11 OpenAPI specification RESTful APIs using Django Rest Framework in Python.
- Designed & normalized the database schema and integrated Gemini API for LLM & LangChain API for retrieval.

Finoq Eduversity Pvt Ltd

Jul. 2024 – Aug. 2024

Android App Developer

Remote

- Developed an Android app using Kotlin & Jetpack Compose to deliver notifications and show webinars and events.
- Delivered notifications using Firebase Cloud Messaging. Follows Modern App Architecture & dependency injection.
- Made API calls using Retrofit and cached data using Room. Synced data in background using WorkManager.

Projects

Department of Visual Media, BITS Pilani

Feb. 2023 - May 2024

Mobile App Developer

Pilani, Rajasthan

- Developed iOS and Android apps using Flutter for college fests serving 8000 users generating INR 1.5Cr+ revenue.
- Implemented event management system, notification system and food ordering system to facilitate fest experience.
- Implemented college navigation by Google Maps API, authentication by Google Sign-In & FCM notifications.

Web Application for Perceptron Machine Learning Model | Python, numpy, pandas, Next. js November 2024

- Coded a Rosenblatt perceptron model, trained it on Iris dataset and created an API to predict species using the model.
- Created the back-end using Django and SQLite. Deployed the API and database on DigitalOcean & frontend on Vercel.

Research

Investigating the Epigenetic Landscape of Severe Malaria

Jan. 2024 - June 2024

- Analyzed genome-wide methylation of *Plasmodium vivax* clinical isolates. Accepted for Proceedings of Malaria Journal.
- Analyzed 60GB+ DNA data efficiently and generated plots using Python and libraries such as matplotlib & pandas.
- Automated analysis tools using Python and Bash scripts. Increased workflow speed using GNU/Linux CLI tools.

Position of Responsibility

Department of Visual Media

May 2024 - Present

Joint Coordinator

BITS Pilani

• Led 33 people in developing apps, websites & videos for 7000 attendees of Oasis 2024, BITS Pilani generating INR 85L.

Relevant Coursework

Computer Programming, Object Oriented Programming, Logic in CS, Discrete Structures in CS, Digital Design.

Technical Skills

Languages: Python, Java, Javascript, Dart, C, SQL, HTML, CSS

Technologies: Flutter, Django & Django REST Framework, React, Next, Firebase, Git, Linux, Jetpack Compose

Certification

• Supervised Machine Learning: Regression and Classification (Stanford University)

Issued June 2024