

## Arpit

**Phone:** +91-8851724434

**Email:** [arpitkharbanda2012@gmail.com](mailto:arpitkharbanda2012@gmail.com)

**LinkedIn:** <https://www.linkedin.com/in/arpit-kharbanda/>

**Github:** <https://www.github.com/webivorous/>

### Career Objective

Aim to work in a challenging work environment where I can utilize my expertise in technical skills, towards the development and implementation of the new ideas, contributing to growth of the organization

### Academic Details

Year(s)	Qualification – Degree	Board/University	Percentage / CGPA
2019-2023	B. Tech in Computer Science Engineering- Specialization in AI and ML	University of Petroleum and Energy Studies	9.27/10 (*Till end of VI semester)
2018-2019	XII	CBSE	84.4 %
2016-2017	X	CBSE	10 CGPA

<b>Subject Electives</b>	Introduction to IOT, Introduction to Cloud Computing, Human Values and Ethics
<b>Technical Proficiency / Skills</b>	C++, Python, MLOps, Competitive Programming, Data Structures and Algorithms, Deep Learning, Machine Learning,

### Projects and Internship

#### Summer Internship – Barclays (BA3 Intern) June 2022-August 2022

- Worked as an *intern* with *Global Technology Infrastructure Services (GTIS)* team @ *Barclays*, *Pune* office. Was offered a ***pre-placement offer (PPO)*** for exceptional performance
- Developed in-house automation scripts for collecting and analyzing data to draw conclusive results and predictions for internal usage by our team. Did in-depth technical analysis of business requirements to determine optimal solution and capacity requirements
- Worked with application solutions especially with modern technologies such as web-based automations using React, internet facing environments, databases and power shell scripts

### **Major Project 1 – Virtual Gym Assistant**

**Aug 2022 – Dec 2022**

- *Exercise Form Feedback and Correction* using Computer Vision
- The availability of specialized trainers is limited and in most cases simply too expensive to provide over extended periods of time, and where financial factors are not a barrier, personal privacy preferences can be. A personal trainer significantly decreases the likelihood of inappropriate and even dangerous execution of exercises in either gym environments or at home
- The system provides basic situated *visual feedback* during exercising and, moreover, performs retrospective automatic assessments of the quality of the performed exercises and suggests measures to improve form. The quality of data in form of live video feed is automatically analyzed, i.e., *the skill of the trainee is assessed*.

### **Minor Project 2 – Food Recommendation Engine**

**Feb 2022-May 2022**

- *Intelligent Self-Learning System* which recommends to the user a highly personalized daily eating which keeps the calories in check and maximizes the user's happiness from food consumption using Evolutionary algorithms and reinforcement learning
- The solution comprises of three modules: *Calories and Happiness Optimizer*, *DailyMeal Planner* and *Daily Exercise Planner*
- The Calories and Happiness Optimizer uses *evolutionary algorithms* to form a solution by using utility or likeliness score of food item from user. The goal of the optimizer is to maximize the total utility score (thus maximizing happiness) and to keep within a specific daily calorie intake
- The Daily Meal Planner takes the weekly eating plan and uses *Q-Learning* to learn the user's preference on what food they like or do not like to eat in close succession
- The Daily Exercise Planner relies on a *Calories Output Regression Model* to recommend the exercise(s) for the day. It uses Differential Evolution algorithm to search for the most suitable exercise(s) to offset the calories consumed based on the daily eating plan

### **Minor Project 1 – Smart POS**

**Aug 2021-Dec 2021**

- This project helps small retailers to determine effective marketing strategies by performing market basket analysis using the Apriori algorithm which generate frequent item sets and association rules
- Implemented using C++ which makes it possible to integrate with existing POS system

### **TinyHouse – Fullstack Home Sharing Application**

**June 2021-Aug 2021**

- Full stack home sharing application built using Ant React UI Library
- Utilized Apollo to make GraphQL requests and used MongoDB Atlas as DaaS for the project
- Used Geo-location API to allow searching for listings by physical location, also using Stripe, configured the front-end and server to take payments

## Accomplishment And Recognition

- ICPC Regionalist: Team qualified *for ICPC Regionals*
- Received *highest scholarship* for two consecutive years in the university
- Received winter internship offer *for Intern Analyst : Infrastructure and Quantitative Research @ Orange Quant Research*
- Received winter internship offer *for MLOps Intern @ Vimaan.ai*
- Received winter internship offer *for Data Science Intern @ MPL (Mobile Premier League)*
- Solved over *300+ coding problems* on various online judges
- Global Rank: 896 in CodeChef February Lunchtime 2021
- Global Rank: 842 in CodeChef June Lunchtime 2021