# Akash R Chavan

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#### **SUMMARY**

Software professional with 5-year experience in software design, development, testing. Able to work collaboratively as well as independently to deliver assigned task on time. Quickly adapts/learns new technologies, tools, languages, and team environment. Currently seeking a **Full Time Opportunity in 2024**.

#### **EDUCATION**

#### California State University, Los Angeles

 $Master\ of\ Science\ in\ Computer\ Science-GPA\ 4.00\ |\ Los\ Angeles,\ California$ 

April 2024(Expected)

Selected Coursework: Introduction to Data Science (cs-4661), Concurrent and Distributed Programming (cs-4075), Artificial Intelligence (cs-4660), Advanced Web Programming (cs-5220), Advanced Software Engineering (cs-5337), Advanced Software Architecture (cs-5390), Advanced Operating Systems (cs-5440), Advanced Artificial Intelligence (cs-5660), Computer and Network Security (cs-5781)

#### Deogiri Institute of Engineering and Management Studies, Aurangabad

Bachelor of Engineering in Computer Science and Engineering - GPA 3.46 | Aurangabad, India

Jul 2016

Selected Coursework: Data Structures, Algorithms, Operating System, Database Management System, Data Warehousing and Data Mining, Compiler Design, Soft Computing

### **PROFESSIONAL EXPERIENCE**

### **FOSSEE IIT Bombay** – Research Associate

Feb 2019 - May 2022

- Developed Yaksh, an e-learning platform using Python, Django, Django Rest Framework, Redis, Celery, Vue.js, Selenium, HTML, CSS, jQuery, Bootstrap, and AWS EC2, AWS S3, Git.
- Created a progressive web application for the test interface using Vue.js and developed a chat, feedback, and contact system for students, teachers & course creators.
- Implemented Diff feature to compare coding answer attempts and show the changes between them.
- Contributed to the development of the Yaksh API, created a discussion forum for the online test interface, optimized site performance, and implemented a notification system for Yaksh.

#### **IEOR IIT Bombay** – Research Assistant

June 2020 - Oct 2020

- Worked on timetabling and capacity utilization/simulation tools using Python, Java, Pandas, NumPy, and Bash.
- Developed Python scripts to ensure accurate data access, manipulation, and reporting functions, and created and maintained Python scripts to automate workflows.
- Deployed Applications in AWS cloud.

## Virtual Labs IIT Bombay – Research Assistant \_

Oct 2017 - Feb 2019

- Developed remote-triggered virtual labs Single Board Heater System (SBHS) using Django, Flask, Celery, JavaScript, iQuery, HTML, CSS, Bootstrap, Apache, Git.
- Improved efficiency and reliability by implementing a load-sharing master-slave architecture with Raspberry Pi's, and a centralized database to prevent data inconsistency.
- Wrote a lightweight Flask API for Raspberry Pi's, refactored the codebase to make it compatible with Python3 and PEP8 standards, and improved the Slot Booking System.
- Created a Moderator Dashboard for monitoring the SBHS web interface in real-time.

#### TECHNICAL SKILLS

Programming/Scripting Language: Python, JavaScript, C, SQL, Java, TypeScript

Frameworks, Tools, and Libraries: Django, Django Rest Framework, Flask, Node.js, Express.js, React, Vue, MongoDB, MySQL, PostgreSQL, pandas, matplotlib, scikit-learn, TensorFlow, AWS EC2, AWS S3, Git, Docker, NumPy, Keras, NLTK

### **ACADEMIC PROJECTS**

## • Ecommerce Customer Churn Analysis and Prediction

The project involved analyzing customer data of an ecommerce company to understand the factors influencing customer churn and building a predictive model to identify customers who are likely to churn. I worked on the project to help the ecommerce company understand customer behavior and prevent churn by providing valuable insights and recommendations. The project involved working with data related to customer demographics, transaction history, and engagement metrics. Using data analysis and machine learning techniques, I developed a predictive model that could identify customers who are at risk of churning, allowing the company to take proactive measures to retain these customers.

# • Tour Package Prediction

As a part of Advanced Machine Learning course, I worked on a project to enable and establish a viable business model to expand the customer base. The objective was to introduce a new offering of packages, specifically a Wellness Tourism Package, and predict which customers are more likely to purchase it. To achieve this, I analyzed the customers' data and information to provide recommendations to the Policy Maker and Marketing Team. I also built a model using the available data of existing and potential customers to make the marketing expenditure more efficient.

## • Stock Forecasting using State-of-the-art Machine Learning Algorithms

Developed a web-based machine learning solution to predict the maximum and minimum price entry of a stock on a particular day. Utilized supervised machine learning regression to solve this problem with stock price as the dependent variable and feature engineering to calculate the independent variables. Implemented state-of-the-art machine learning algorithms to improve the accuracy of the predictions. Built the project using technologies such as Python, Pandas, NumPy,

scikit-learn, TensorFlow and web technologies like Django Rest Framework, AngularJS and deployed using AWS EC2, S3 and DynamoDB.

### • Taskr: A task management Web App

A task management app which supports personal Task Boards, allowing simple and organized task tracking that separates overarching goals or topics from specific tasks. Taskr has both minimal and clean UI that promotes well organized tasking.

### PERSONAL PROJECTS

### • twweet-cli GitHub

The command-line interface designed to enable users to compose and publish tweets directly from their command-line interface, eliminating the need to open a web browser or use a separate Twitter application. This project aims to streamline the process of sharing thoughts, updates, and content on Twitter while providing a convenient and efficient way to interact with the platform.

#### • subsheets GitHub

Utility to create subsheets in excel file. A tool designed to simplify the process of managing subsheets within Excel files. This utility aims to enhance efficiency and organization by allowing users to quickly generate and organize subsheets, thereby streamlining data management tasks.