ANMOL MAHAJAN

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EDUCATION

B.Eng.: Computer Engineering, Thapar Institute of Engineering and Technology   07/2016 – 07/2020
CGPA: 8.04

TECHNICAL SKILLS

- **Languages –** C, C++, Python, Java, CUDA C, HTML and CSS
- **Tools –** Django, MySQL, Apache Hadoop, MapReduce, PySpark, Wireshark, Netcat, Postman, MATLAB, Latex
- **AWS Services –** EC2, S3, EBS, AWS RDS

- **Operating Systems –** Windows, Linux, Raspbian OS
- **Computer Networks –** TCP and UDP Socket Programming, Subnetting, ARP, DHCP, HTTP, DNS, Routing and Switching (RIP, OSPF, BGP)

WORK EXPERIENCE

upGrad Education Private Limited, Bangalore, India
Senior Associate– Content   July 2020 – Present

- Analyzed the demand of technical online programs; helped the team manager build the program, including designing the curriculum, conducting current learners research, and selecting the type of technology stack to be taught for Bachelor's and Master's in Computer Applications with specialization in cloud computing.

- Contributed to the Computer Networks and Network Programming course development, which included tools like Wireshark, Netcat, Mininet, and XAMPP to design a network application project in which the client would connect to the server, and the server will provide an IP address, and the netmask. The server would verify it and answer whether the test is successful or failed—the project involved Protocol Design Requirements, Protocol Implementation, Protocol Enhancements and Result Analysis.

- Undertook regular cloud infrastructure and services webinars for the internal team to teach them about Software Development in the AWS cloud.

upGrad Education Private Limited, Bangalore, India
Content Consultant – Intern   January 2020 – June 2020

- Worked with the Data Engineering Content Team to create projects like Automating Exploratory Data Analysis of Housing Data from Kaggle and Heart Disease Detection.

- Used tools like NumPy, Pandas, Matplotlib and Seaborn for Exploratory Data Analysis, and SciKit-Learn Pipelines to automate the data processing for the large dataset.

- Worked with the Software Development Content Team to develop content on AWS services like EC2, EBS and AWS RDS.

TRAININGS AND CERTIFICATIONS

- **AWS Cloud Practitioner Certification (April 2021)**
  - Achieved AWS official certification for cloud practitioner with a score of 957/1000.
- **Certificate course in AWS from Coursera (February-March 2021)**
  - Acquired knowledge of AWS Fundamentals for Building Serverless Applications, AWS Cloud Infrastructure and Security, and AWS Cloud Migration.
- **AWS Builders Online Series on Choosing Databases in a Serverless Architecture (August 2019)**
  - Participated in the online series which emphasized on Relational Databases and Redshift.
- **Coding Blocks Private Limited (June-July 2018)**
  - Acquired web development training using Django Web Framework and developed Student Co-op Management web application.

ACADEMIC PROJECTS

Visual Aid Assistant (Capstone Project)
- Used Raspberry Pi 3B+ on Raspbian OS to design goggles for the visually challenged which detect objects/obstructions and provide real time speech output.
- Used COCO dataset for object detection, and GTTS library for the text-to-speech function.
- Decreased the processing time by narrowing the field of view and optimizing it further by implementing an algorithm that prioritizes objects coming towards the user and rejects those which are moving away.
- Increased its accuracy by deploying image enhancement techniques.
- Involved in the setting up of OS and interconnectivity of modules.
- Link to the video demonstration of the project – project demonstration.

API Rate Limiter
- A server-side rate-limiting solution which tracks the number of requests that are made by a user over a given time-period and blocks requests when the number of calls exceeds the predefined threshold.
- The server-side processing is carried out using Django REST API Framework to handle API requests efficiently.
- SQLite, the default database of Django Framework, is used to store the information of users via forms.
- The postman application is used to test rate limiting API through a token that identifies and uses the API.
- The project details are shared here: https://github.com/Anmol-Mahajan/Project-API-Rate-Limiter

Student Co-op Management System
- Developed an application to manage the placement and internship information of the students. It notifies the students if they are eligible to be hired by a particular company and allows them to fill their information accordingly.
- Used HTML and CSS to design the Student and Placement Coordinator Webpages.
- Employed SQLite for managing the database of the student and internship information.
- Worked with Django Web Framework which uses Python Programming language in the backend to execute functionalities like sorting eligible companies for a student based on company's criteria, shortlisting students and managing the notifications for upcoming companies and additional rounds of interviews.

Bus Availability Checking System in Punjab
- A bus availability check system for finding cheaper and readily available buses taking the shortest travelling path by collecting two inputs from the user – the time and the place of travel.
- Gathered data from official sources and added it manually using the Standard Template Library in C++.
- Implemented the system using Dijkstra's Algorithm.
- Employed the knowledge of Data Structures, Algorithms and Computer Programming (C++).
- The project details are shared here: Anmol-Mahajan-Bus-Availability-Checking-System-

ACHIEVEMENTS

- Won multiple medals in various swimming competitions held in various universities across the state of Punjab.
- Consecutively organized 'Code to Play' event for 2 years during the annual college festival.
- Won a bronze medal at the CBSE North Zone (India) Judo Championship in the year 2013.