# SAGAR SHARMA

Competitive Programmer — Software Developer Engineer

## Education

## Bhagwan Parshuram Institute of Technology

Aug 2024 (Expected)

Bachelor of Technology in Computer Science

Rohini, Delhi

# Professional Experience

#### **NeuroNexus Innovations**

Nov - Dec 2023

Software Engineer Intern

Remote

- Led and built full stack Shopping application and job portal from scratch 100%
- Designed and implemented the backend architecture of applications from scratch using Node.js and Express.js utilizing Firebase as the primary database system to create robust and efficient RESTful APIs.
- Successfully integrated backend services for efficient data management and real-time communication.
- Acquired expertise in API integration, real-time data handling, app-wide state management, HTTP calls, and quickly
  adapted to live projects. Actively involved in optimizing backend calls, resulting in improved app responsiveness and
  substantial cost savings by 30%.

## The Sparks Foundation

Aug – Sep 2023

Web Developer Intern

Remote

- Developed a feature-rich online banking system using a technology stack that included HTML, CSS and JavaScript, ensuring a user-friendly and responsive web interface.
- Leveraged React.js to enhance the interactivity and functionality of the online banking platform, enabling users to initiate various transactions, view balances, and manage their accounts seamlessly. This involved building the 100% app from scratch.
- Examined and maintained unit and integration test cases to ensure code quality

### Projects

## Face Emotion Recognition | Python, Keras, TensorFlow, Jupyter Notebook, Google Colab

Oct 2023

- Developed a real time emotion recognition application using Python for recognising 5 human emotions.
- Implemented TensorFlow GPU and Keras to train model having accuracy of 72%
- Utilized TensorFlow combined with Keras to achieve a 72% accuracy in training the model, extracting data from Kaggle.

## Stock Prediction Application | Python, TensorFlow, HTML, CSS, Javascript

Oct 2023

- Engineered a web application using HTML, CSS and Javascript to calculate future stock prices for 100+ companies.
- Processed user inputted variables to train model, ie. epochs, LSTM, dataset size, providing users opportunities to choose and learn about basic machine learning in 3 steps of training, validating and predicting.
- Employed TensorFlow for training and validating the model, achieving an accuracy of up to 80%.

#### Algorithm Visualiser | React. Js, Node. JS, Javascript

Sep 2023

• Programmed an Algorithm Visualizer website, simplifying complex algorithm concepts including sorting, searching and graph algorithms. React.JS and D3JS for interactive visuals, enhancing user comprehension.

# Achievements

- Secured 1k rank in CodeKaze 2023 having 100k+ participants
- Solved over 1000 DSA problems across various platforms LeetCode, Pepcoding, Codeforces, Medium
- Won 2nd rank in Summer coding competition Puzzle Challenge

#### Skills

Languages: C, C++, DSA, Python, HTML, CSS, JavaScript, SQL, Java (familiar)

Frameworks: ReactJS, GitHub, VS Code, MongoDB (No SQL), NodeJS, ExpressJS

Tools: Git, REST APIs, Linux, TensorFlow, AWS (familiar)

Coursework: Object-Oriented Design, Computer Networks, DBMS, OS, Agile Soft Skills: Ability to focus on Code Readability, Testability, Observability

# **Publications**

## **Demistifying Dynamic Programming**