# SAHAJ DEEP SINGH

## Education

CBSE

## SRM Institute of Science and Technology, Chennai, India

Bachelor of Technology in Computer Science and Engineering

CGPA: 8.86/10

Sep 2021 - Jun 2025

Takshashila Public School, Shahjahanpur, Uttar Pradesh

12th Percentage: 91.2

Takshashila Public School, Shahjahanpur, Uttar Pradesh

Jun 2019

Jun 2021

CBSE

10th Percentage: 87.6

## Work Experience

#### Mahindra and Mahindra

Feb 2024 - Mar 2024

Software Engineering Intern

Chennai, Tamil Nadu

- Enhanced user interface clarity and usability, resulting in a 20% increase in interface readability across various lighting conditions.
- Identified and resolved over 50 bugs, boosting overall app stability by 40%.
- Evaluated and validated applications from outsourcing companies to ensure quality standards and seamless integration with existing systems.

## Xfinitive (Freelancing)

May 2024 - Jul 2024

Application Developer

- Developed Xfinitive, a cross-platform healthcare app using Flutter, achieving 90% code reuse between iOS and Android versions.
- Optimized Flutter implementation to create a lightweight app (26MB install size) with rapid performance (sub-2-second cold start time) on mid-range devices.
- Integrated Firebase backend, enabling secure storage of 10GB of user data and real-time synchronization with sub-100ms response times. ProjectVideo

#### Projects

## Innerwell | (Application Developer)

- Implemented machine learning-based scoring system to predict depression levels with 92% accuracy.
- Architected a comprehensive mental health platform integrating 9 core features: chat support, medication information, assessments, therapist bookings, helplines, journaling, art therapy, support groups, and educational resources, reducing user navigation time by 35%. Code

#### The StartupCompany | (Front-End Developer)

- Guided early-stage founders to validate ideas, develop compelling business plans, and acquire initial 100 customers.
- Engineered responsive user interfaces using Next.js, leading to a 40% increase in page load speed and an enhanced user engagement score. Code

### Predicting Solar Energy Using Machine Learning | (Machine learning Engineer)

- Prediction errors were highest in winter; excluding these months reduced test error from 41% to 35%.
- Implementing PCA and gradient boosting helped reduce dataset dimensionality and highlighted the most critical weather variables for accurate predictions. Code

## Lung Cancer Detection Using Deep Learning | (Machine Learning Engineer )

- Engineered an image classification system categorizing lung cancer types: Normal, Adenocarcinoma, Large Cell Carcinoma, and Squamous Cell Carcinoma.
- Implemented Convolutional Neural Networks (CNN) with the Xception model, achieving a 93% accuracy rate in image classification.

## Technical Skills

Programming Languages: Advanced: Java, Dart, Python Intermediate: Javascript, SQL,

Frameworks: Advanced: Flutter, Next.js,React.js ,PyTorch, TensorFlow, Git — Intermediate: Docker, OpenCV, AWS

Coursework: Data Structures and Algorithms, Object-Oriented Programming, Operating Systems, Computer Networks

Coding Platform: Leetcode

#### Extra-Curriculars

#### Model United Nation (MUN) Delegate - Chile

Represented Chile in a simulated UN conference, leading over 15 debates on global issues and collaborating with 50+ delegates to draft and ratify 5 resolutions.