[redacted]

Education

SRM Institute of [redacted] [redacted], [redacted]
Bachelor of [redacted] *in CSE (Data* [redacted]*), Current CGPA: 9.50* [redacted] *– Present*

[redacted] [redacted], [redacted]
Class 12th, [redacted]*: 92.8* [redacted]

[redacted] ([redacted]) [redacted], [redacted]
Class 10th, [redacted]*: 92.8* [redacted]

Experience

Data Analyst Intern
Zidio Development *Remote*

- Engineered a segmentation model using deep learning techniques to categorize large datasets, yielding actionable business insights.
- Employed convolutional neural networks (CNNs) and advanced algorithms, enhancing segmentation model accuracy by over 35%.
- Applied data augmentation strategies to bolster model robustness across diverse datasets.
- Collaborated with cross-functional teams to successfully deploy the segmentation model in production environments.

Research Intern
[redacted], [redacted] *Remote*

- Collaborating with Prof. [redacted] to develop a real-time illegal trash dumping detection system.
- Utilizing OpenPose for pose estimation in C++ to identify illegal trash dumping activities with high precision.
- Designed and deployed a multi-class classification model to differentiate between various types of dumping actions, achieving a detection accuracy improvement of over 40%.
- Incorporated real-time video processing pipelines, reducing detection latency by 20% for immediate response systems.
- Leveraged neural networks, combined with object detection and motion tracking, to enhance the detection framework's accuracy and efficiency.

Mobile App Developer
SRM Hospitals *SRM Hospital* [redacted]

- Developed a mobile application aimed at enhancing patient-hospital communication, particularly for pregnant women, by providing direct access to healthcare services and support.
- Integrated real-time features such as appointment scheduling, medication reminders, and emergency contact options, resulting in a 35% reduction in missed appointments and better patient adherence.
- Utilized Flutter for cross-platform app development and Firebase for secure backend data management, achieving a 90% app uptime and ensuring data synchronization.
- Collaborated with healthcare providers to optimize user experience, leading to a 50% increase in user engagement and a reported 75% improvement in communication satisfaction from users.

Projects

Accident Detection Using Machine Learning and CNN Python, VGG19, InceptionV3

- Published a paper on an accident detection framework using machine learning and convolutional neural networks (CNN) for real-time video analysis.
- {Utilized a large dataset to train the model, achieving high accuracy in identifying potential accident scenarios in real-time.
- Combined object detection and motion tracking techniques to accurately detect accident events in various environments. .
- Optimized the model to function effectively within limited processing constraints, enhancing real-time applicability.

ChromaGenius: Deep Learning Image Colorization Python, GANs

- Trained a deep learning model for image colorization using [redacted] Adversarial Networks (GANs).
- Executed adversarial training, enabling the generator to produce realistic colorizations of grayscale images.
- Achieved high-quality results by refining the model through iterative training, enhancing performance by 20%.
- Reduced training time by 25% through model optimization [redacted].

Document AI: PDF Data [redacted]

- Developed a PDF data [redacted] system using [redacted] for accurate, [redacted] data [redacted] from un[redacted] documents.
- Automated workflows, achieving a 40% increase in [redacted] and reducing manual effort.
- Advanced to the finals in a competitive showcase, highlighting the project's [redacted] impact and practical relevance.
- Optimized [redacted] speed by implementing the [redacted]Augmented [redacted] (RAG) technique, improving document parsing time by 20%.

[redacted] **Market** [redacted] **System** Python, [redacted]

- Designed a deep learning-based stock market [redacted] system using [redacted] models to analyze [redacted] stock prices and forecast trends.
- Enhanced model accuracy by integrating technical [redacted] like RSI and MACD as [redacted] features.
- Implemented a pipeline for data pre[redacted], feature engineering, and model [redacted], achieving a [redacted] accuracy improvement of 30%.
- Reduced [redacted] latency by 20% through optimization of model architecture and hyperparameter tuning.

Peer-to-Peer [redacted] Database, Python, [redacted]

- Constructed a decentralized platform for peer-to-peer energy trading using [redacted] reducing transaction costs by 30%.
- Designed a secure transaction system facilitating energy exchange between producers and consumers, improving trading [redacted] by 25%.
- Developed smart contracts to automate trading processes, [redacted] transparency by 40% and reducing manual intervention.
- [redacted] real-time analytics tools, [redacted] energy usage patterns and enabling users to reduce energy costs by up to 15%.

Certifications

Google AI ML AICTE Virtual [redacted]	View [redacted]
NPTEL Python for Data Science (Top 2%)	View [redacted]
NPTEL Programming in Java	View [redacted]
Altair Data Science Virtual [redacted] (AICTE)	View [redacted]
Meta Hacker's Cup	View [redacted]
Intel Unnati Lab	View [redacted]
AWS Skill Builder Machine Learning	View [redacted]
Research Paper on Accident Detection	

Technical Skills

Languages: Java, Python, C/C++, SQL,[redacted],Flutter, [redacted]
[redacted]: React, [redacted], [redacted], [redacted],Angular.js
Developer Tools: Git, [redacted], Firebase, Google Cloud Platform, VS Code, Google Colab, Android Studio
Libraries: Pandas, NumPy, [redacted], OpenCV, Scikit-learn, [redacted], Keras, PyTorch, SciPy, [redacted], Plotly
Competitive Skills: LeetCode (1568),Competitive Programming ([redacted] 1300)

[redacted]

Mobile No.: [redacted]
Email-id: [redacted]
LinkedIn: www.linkedin.com/in/abhinav[redacted]
GitHub: https://github.com/[redacted]-Prajapati

PROFESSIONAL SUMMARY

I am a skilled Full Stack Web Developer and Embedded [redacted] with expertise in web and IoT projects. Experienced in building sy[redacted] from scratch, I specializ[redacted] development (React, React Native), back-end frameworks (FastAPI, [redacted]), and embedded programming (Arduino, ESP32). Notable achievements include top rankings in the [redacted]ngapore, showcasing my problem-solving and technical leadership. Pro❖fcient in [redacted], [redacted], [redacted], and AWS, I am dedicated to creating practical, impactful solutions.

CORE COMPETENCIES / SKILLS

- **Front-End Development:** React, React Native, Tailwind CSS
- **Back-End Development:** [redacted], [redacted]
- **Database [redacted]:** [redacted]
- **Embedded Systems:** C/C++ for Arduino, ESP32
- **Tools and Platforms:** Docker, [redacted], [redacted] (EC2, [redacted])
- [redacted] **Skills:** Problem-solving, Team [redacted]

ACHIEVEMENTS

- 1st Position – [redacted] Hackathon, [redacted]
- 1st Runner Up (2nd Position) – [redacted], [redacted]
- 2nd, 4th, and 5th Positions – [redacted], [redacted]
- All [redacted] Rank 11 – DD [redacted] 2023
- 2nd Runner Up – [redacted] Hackathon, [redacted], [redacted]

[redacted]

- Embedded [redacted] (Robotics), [redacted], [redacted], [redacted] [redacted] - Led the design and development of robotic projects using Raspberry Pi and Arduino Uno for DD [redacted]. Collaborated with a multidisciplinary team to prototype and test robotic solutions. - Implemented drive systems and control algorithms, integrating mechanical components to enhance robot functionality.

PROJECTS

- HYDRATEME – Smart Hydration Solution (Current Project) Combines IoT sensors and a mobile app to track and personalize water intake based on health data, activity, and weather conditions. **Technologies Used:** React Native, [redacted], [redacted], ESP32
- Home Automation System Built a home automation system using Home Assistant and ESP32 modules for remote control of lights, appliances, and door locks with RFID tags. **Technologies Used:** Home Assistant, ESP32, RFID sensors

LEADERSHIP VOLUNTEER [redacted]

- Technical Team Leader Experienced in task delegation and team coordination, ensuring effective collaboration in technical projects. Led multidisciplinary teams from ideation to testing phases.

[redacted]

[redacted]

[redacted]DU[redacted]ATION

[redacted]

[redacted]achelor [redacted] ([redacted]. [redacted]ech.) [redacted]hennai, [redacted]

[redacted]urrent [redacted]GPA (9.65) [redacted] – [redacted]urrent

[redacted] ([redacted]-[redacted])

12th [redacted]:79% *April.2020-[redacted]*

[redacted]-[redacted]’[redacted] ([redacted].[redacted].[redacted])

10th [redacted]: 85% [redacted]

Project[redacted]

[redacted]-Pre[redacted]ent

Fin[redacted]axPro: [redacted]ax [redacted] [redacted]y[redacted]te
De[redacted]loped a bu[redacted] [redacted] t[redacted]ystem to automate tax filing for [redacted]dividual[redacted] an[redacted] bu[redacted]ines[redacted]. Integrated data collection, in[redacted]gent t[redacted]x calculat[redacted]ns, and c[redacted]pliance [redacted]onit[redacted]ing. [redacted]ns[redacted]ed [redacted] [redacted]ty u[redacted]i[redacted]g [redacted]S[redacted]ncryption a[redacted] pro[redacted]ded cu[redacted]tomizable reporting. [redacted]tilized H[redacted]ML/[redacted]SS , va[redacted]cript, [redacted], M[redacted]goD[redacted] for a [redacted]calable and [redacted]ecure [redacted]olutio

ColorCraft: AI-Driven Image Colorization
Developed and trained an AI model for image colorization using a Generative Adversarial Network (GAN). [redacted]he model features a generator that colorizes grayscale images and a discriminator that distinguishes between generated and real color images. Through adversarial training, the system produces vibrant and realistic colorizations, achieving high-quality results.

WeatherWi[redacted]e: Real-[redacted]ime Weather API Integration
Integrated a [redacted]eal-time [redacted]eather API into a website to provide u[redacted]er[redacted] with accurate and up-to-date weather information. Implemented features such as location-based we[redacted]h[redacted] updates, forecasts, and weather alerts. [redacted]nsured a responsive and user-friendly interface for seamless access to weather data.

[redacted]: [redacted]fficient Order [redacted]erving Application
De[redacted]igned and developed a [redacted]treamlined order [redacted]erving application utilizing the Fir[redacted]t-[redacted]ome-Fir[redacted]t-[redacted]erve (F[redacted]F[redacted]) algorithm. [redacted]he application e ciently manage[redacted] and processe[redacted] cu[redacted]tomer order[redacted] in the order they are received, optimizing the order fulfillment process for enhanced cu[redacted]tomer [redacted]ati[redacted]faction and operational e ciency.

[redacted]ertification[redacted]

[redacted]ertification in D[redacted]M[redacted] by [redacted]calar

AWS Skill builder machine learning

NP[redacted]L Data analy[redacted]i[redacted] of algorithm

NP[redacted]L Programming in Java

[redacted] AI/ML Virtual Intern[redacted]hip

Technical Skills

Languages: Java, Python, C/C++, SQL (Postgres), JavaScript, HTML/CSS, [redacted]
Frameworks: [redacted], [redacted], [redacted], [redacted]
Developer Tools: [redacted], [redacted], [redacted] Platform, [redacted], Visual Studio, [redacted]
Libraries: pandas, NumPy, Matplotlib, [redacted].