

VIVEK PRAKASH

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EDUCATION

Dr. A. P. J. Abdul Kalam Technical University

IIMT College of Engineering

Bachelor of Technology; CGPA: 8.47

Maheshwari Public School

Senior Secondary Education, Marks: 82.2%

Bhai Parmanand Vidya Mandir

Secondary Education, Marks: 92%

Greater Noida, India

September 2022 – June 2026

Rajasthan, India

April 2019 – March 2021

New Delhi, India

March 2019

SKILLS SUMMARY

- **Languages:** Python, Embedded C, JavaScript, TypeScript, Java
- **Frameworks:** Scikit-Learn, TensorFlow, Node.js, React.js, Next.js, Flask
- **Tools:** AWS, MySQL, MongoDB, PostgreSQL
- **Microcontrollers:** Arduino Uno, Arduino Nano, Esp-32, Raspberry-pi, Esp-32 Cam
- **Platforms:** Jupyter Notebook, Visual Code Studio, IntelliJ IDEA, Arduino IDE
- **OS:** Linux, Mac OS, Windows
- **Soft Skills:** Problem Solving, Teamwork, Adaptability, Communication, Decision-making

WORK EXPERIENCE

Open Source Contributor | [GSSOC](#)

October 24 – November 24

- Ranked **#3 out of 40,000 participants** in a competitive open-source program.
- Earned **7895 points** through consistent and impactful contributions across multiple repositories.
- Successfully submitted **200+ Pull Requests (PRs)**, ensuring high code quality and adherence to project standards.
- Maintained a **38-day contribution streak**, demonstrating dedication, problem-solving skills, and collaboration with diverse teams.
- Contributed to projects involving **web development, machine learning, and software solutions**, enhancing the functionality, scalability, and documentation of various open-source projects.

Application Developer | Freelance

May 24 – September 24

- Developed innovative Retrieval-Augmented Generation (RAG) applications, such as an SQL AI tool that converts natural language queries into SQL commands, enabling users to interact seamlessly with databases without requiring any prior knowledge of SQL or Boilerplates.
- Employed a diverse range of technologies and tools, including Python, Flask, React.js, Langchain, and machine learning frameworks, to develop applications that are intuitive, efficient, and user-friendly.
- Collaborated with clients to understand their specific needs, translating them into effective technical solutions that address real-world problems.

PROJECTS

AgroTech AI | [LINK](#)

October 24 – November 24

- **Description:** Open-source, web-based platform providing machine learning solutions for agriculture, including crop management, soil health assessment, pest control, and yield prediction.
- **Role: Top Contributor**
 - Developed **e-commerce website** for the platform.
 - Built **machine learning models** like Crop Disease Prediction, Fertilizer Prediction, and more.
 - Implemented **backend APIs** and **frontend interfaces** for ML models.
 - Collaborated with the team on application planning and future roadmap.
- **Tech Stack:** React, Tailwind, Flask, Node.js, Express, MongoDB, Python, Machine Learning, Deep Learning.

SQL AI RAG Application | [LINK](#)

September 24

- **Description:** AI-powered tool that generates SQL queries from natural language, enabling seamless and secure database interactions without SQL expertise.
- **Features & Tech Stack:** Combines Flask, React.js, Langchain, Gemini Pro, and SQLite to deliver real-time query generation, intuitive UI, and secure database connectivity.
- **Impact:** Simplified database operations, making data access and manipulation efficient for users across diverse domains.

Jeevika | [LINK](#)

April 24 – July 24

- **Description:** AI-integrated **automatic drug dispenser system** that connects doctors, patients, and pharmacies. Enables prescription generation, vitals scanning, and medicine dispensing via QR code and smart IoT interfaces.
- **Features & Tech Stack:** Combines React.js, Flask, AWS, **Raspberry Pi, Arduino**, IIOT Sensors, and Gemini APIs to support doctor-patient integration, real-time vitals monitoring, SMS-based prescription delivery, OTC medicine purchase, and **secure AWS prescription storage**.
- **Impact:** Revolutionizes rural and urban healthcare access by automating diagnosis, medicine distribution, and health assessments—bridging digital healthcare gaps with minimal human intervention.

Sahkarya | [LINK](#)

March 24 – June 24

- **Description:** Sahkarya is a web-based platform connecting citizens with local authorities, featuring a complaint portal with image uploads, pinpoint location, and IoT-based automatic problem detection.
- **Features & Tech Stack:** Combines React.js for the frontend, Flask for the backend, and IoT devices for real-time problem detection. The admin panel is powered by interactive maps, analytics, and a user-friendly interface, enabling efficient issue management and fast response times.

CERTIFICATES

Unsupervised Learning, Recommenders, Reinforcement Learning (Stanford Online) | [CERTIFICATE](#) November 2024

- Utilized unsupervised learning techniques for unsupervised learning, including clustering and anomaly detection.
- Developed recommender systems using a collaborative filtering approach and a content-based deep learning method.
- Created a deep reinforcement learning model for decision-making tasks and optimization.

Advanced Learning Algorithms (Stanford Online, DeepLearning.AI) | [CERTIFICATE](#) October 2024

- Built and trained a neural network with TensorFlow to perform multi-class classification.
- Applied best practices for machine learning development to ensure model generalization to real-world data and tasks.
- Developed and utilized decision trees and tree ensemble methods, including random forests and boosted trees.

Postman API Fundamentals Student Expert (Postman) | [CERTIFICATE](#) October 2024

- Learned about APIs and their importance in modern software development for enabling seamless system communication.
- Gained proficiency in using Postman to make GET, POST, PATCH, and DELETE requests, handling query parameters, bodies, headers, and response codes.
- Acquired skills in basic scripting and API key authorization to integrate APIs into applications securely and efficiently.

Supervised Machine Learning: Regression and Classification (Stanford Online) | [CERTIFICATE](#) September 2024

- Built machine learning models in Python using popular libraries like NumPy and scikit-learn for efficient model development.
- Developed and trained supervised machine learning models for prediction and binary classification tasks, including linear regression and logistic regression.

Data Science BootCamp (Udemy) | [CERTIFICATE](#) August 2024

- Mastered essential data science skills, including statistical analysis, Python programming with libraries like NumPy, pandas, matplotlib, Seaborn, and machine learning with scikit-learn and statsmodels.
- Gained hands-on experience in pre-processing data, performing regressions, cluster and factor analysis, and developing machine learning algorithms in Python, using deep learning frameworks like TensorFlow.
- Applied data science concepts to real-world business cases, enhancing machine learning models with techniques like cross-validation and hyperparameter tuning, while developing a strong business intuition.

Google Cloud Computing Foundation and Generative AI (Google) | [CERTIFICATE](#) November 2023

- Completed multiple Google Cloud certifications, including preparing data for ML APIs, building secure cloud networks, and setting up app development environments.
- Gained expertise in Google Cloud computing foundations, covering data, ML, AI, networking, security, and infrastructure essentials.
- Mastered generative AI concepts through prompt engineering and implementation, earning recognition in AI-driven technologies.