Aarav Rajput

**** +91 9540795054 — □ aarav.rajput2003@gmail.com in aaravrajput — 🔾 XenonyxBlaze — 🖵 xenonyx.xyz

Summary — A highly motivated and exploration oriented programmer with a passion for researching new technologies and experimenting with them to craft creative solutions to real world problems

Relevant Skills

Data Science Exploratory Data Analysis, Data

Visualization, Dashboarding

ML Foundations Supervised Learning, Unsupervised

Learning, SemiSupervised Learning

Neural Networks LSTMs, CNNs, RNNs, VAEs, GANs

Agent Systems Reinforcement Learning, Expert Systems Big Data Data-mining, Data Warehousing

NLP Lemmatization, Embedding Techniques,

Encoding Techniques, Sentiment Analysis

ML Ops Git Versioning, CI/CD Pipelining, Model

Tuning

Mathematics Linear Algebra, Statistical Inference,

Probability Theory

Webdev MERN, Designing, Wireframing

Logic Data Structures, Design and Analysis of Algorithms, Object Oriented Programming

Languages C, C++, Java, Python, R, Typescript Miscellaneous Plant UML, LaTex, 3D Modelling

Experience

The Globalizers Dec 2024 - present Technical Intern Indore.India

- Helped develop a flashcard learning application for vocabulary memorization
- Designed and developed a custom algorithm that enhances learning efficiency

Projects

GRE Matter Dec 2024 – present

Algorithm Designing, React Native, Reinforcement Learning

Developed a smart algorithm to improve students' learning efficiency

- Improvised on techniques like half life regression for predicting students' information retention
- Implemented the back-end for the learning app

AttackML Jan 2024 – Apr 2024

Data Analysis, ML Ops

VIT Bhopal

- Developed the data pre-processing module for the ML pipeline
- Experimented with various data analysis techniques on real time network traffic data
- Improved the model's performance on the raw network packet data by implementing encoding techniques

Publications

Secure Federated Learning for Collaborative Intrusion Detection Systems Dec 2024

Published in a SCOPUS indexed journal, Nanotechnology Perceptions Vol.20,S16 ISSN: 1660-6795. Linked here

Building Resilient AI-enabled Detection Systems for .NET Threats

Published in a SCOPUS indexed journal, Nanotechnology Perceptions Vol.20,S16 ISSN: 1660-6795. Linked here

Enhancing Power Transformer Reliability with Machine Learning-Based Fault Detection and Data Analysis Jan 2024 Published in SPRINGER conference proceedings Innovation and Emerging Trends in Computing and Information Technologies

ISSN: 1865-0929. Linked here

VIT Bhopal University, Madhya Pradesh, India 2021-2026

Integrated Masters of Technology in Computer Science Engineering with specialization in Artificial Intelligence

7.55 CGPA

Dec 2024

The Globalizers

Certifications

Education

IBM Machine Learning Professional Certification IBM Data Science Professional Certification

Jan 2025

Feb 2025

Leadership / CoCurricular

Data Science Club Apr 2023 – Apr 2024

Team Lead, WebDev Team

VIT Bhopal

- Led a small team of developers on various web development tasks for the club
- Refurbished and maintained the official club website
- Trained junior member developers by conducting workshops and group discussions
- Volunteered in successfully conducting the club events

Apollo UI/UX Club Mar 2023 – Aug 2023

Technical Lead VIT Bhopal

- Organized seminars and workshops led by industry professionals provide students with real-world insights and best practices.
- Mentored and supported aspiring UI/UX designers, providing guidance and feedback on their projects and career development

Codecademy VIT Bhopal Chapter

Nov 2021 - Nov 2022

VIT Bhopal

Community Co Lead

- Helped managing a university chapter of 50+ members
- Hosted innovative events like gamejams, hackathons and fun community interaction events
- Made connections in the industry by collaborating with professionals