

# Aryan Himmatlal Prajapati

B.Tech.
Electrical Engineering
Indian Institute of Technology Jodhpur

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### **EDUCATION**

Degree/Certificate	${\bf Institute/Board}$	CGPA/Percentage	Year
B.Tech.	Indian Institute of Technology Jodhpur	7.78 (Current)	2021-Present
Senior Secondary	GSHSEB, Gandhinagar	89.23%	2021
Secondary	GSHSEB, Gandhinagar	93.50%	2019

#### EXPERIENCE

### • Decimal Point Analytics

May 2024 - Jul. 2024

 $Software\ Development\ Intern$ 

Mumbai, India

- Extracted data from mutual fund prospectuses using pdfplumber, SpaCy NER, and regex.
- Built a trading strategy backtesting app using Streamlit, containerized with Docker, and automated with Jenkins.
- Developed chatbot frontend with React, managing state and styling with custom CSS.

• NextGen Ventures

Jun. 2023 - Oct. 2024

Machine Learning Engineering Intern

San Francisco, United States

- Developed and productionized an ML model under the guidance of the CEO and CTO.
- Built a Food Recommender System to reduce food ordering time, addressing cold start problems.
- Created a Recommender System suggesting Top K Cuisines for users, using industry research and public datasets.

• Jio Platforms Limited

Jun. 2023 - Aug. 2023

Hyderabad, India

- Developed a Network Data Capturing App to capture download/upload speeds and location.

- Worked on Crowd-Sourced Network Coverage Mapping and NL Interface for Enterprise Data.
- Built a model to extract text from images using EasyOCR, PyTesseract, and Langchain.

#### Publications

Summer Intern

- 1. Aryan Prajapati, Jyoti Dhayal and Dr. Nishant Kumar "A BMS Enabled Tracking Technique for Isolated Solar Based Charging Infrastructure", 2023 IEEE 3rd International Conference on Smart Technologies for Power, Energy and Control (STPEC), Bhubaneswar, India (Accepted, Link to Publication)
- 2. Aryan Prajapati, Tarun Raj Singh and Dr. Nishant Kumar "Credit Card Fraud Detection Using XGBoost Driven Oversampling Based Machine Learning Technique: For Application Such as Electricity Bill Payments", 2nd IEEE Industrial Electronics Society Annual Online Conference(IES ONCON 2023)(Accepted, Proof)
- 3. Aryan Prajapati, Tarun Raj Singh and Dr. Nishant Kumar "Dynamic Payback Period Estimation for Solar Power Plants Through ML Based Solar Generation Forecasts," 6th IEEE International Conference on Systems, Computation, Automation and Networking (ICSCAN 2024), Puducherry, India (Accepted, Proof)
- 4. Aryan Prajapati, Tarun Raj Singh, Jyoti Dhayal and Dr. Nishant Kumar "Optimized Solar Power Generation Forecasting: A Novel ML Approach with Sequential Hyperparameter Tuning and Trend Adaptation", submitted in 2nd IEEE International Conference on Computational Intelligence, Communication Technology and Networking (CICTN2025), Ghaziabad, India.

#### Projects

# • NEURAL NETWORKS FOR MicroControllerUnit (MCUNet)

Mar. 2024 - Apr. 2024

Report

C++, Python, Tensorflow

- Implemented neural network on the STM32F429ZI Discovery board to detect electrical fault
- It is a highly resource constrained device which provides only 32KB of memory declare variables or weights.

#### Trading Strategy Backtesting App

May 2024 - Jun. 2024

Python, Pandas, Matplotlib, Streamlit, Backtesting

Live App | Github

- Created a Streamlit app for backtesting various trading strategies such as SMA, EMA, Bollinger Bands, RSI etc.
- Implemented backtesting logic for multiple trading strategies using Python and the backtesting library.

# • Top-K Cuisines Recommender System

Dec. 2023 - Jan. 2024

Python, Pandas, NumPy

Github

- Developed a recommendation system for top-K cuisines using Jaccard similarity and Manhattan distance.
- Implemented weighted scoring to combine user attributes for personalized cuisine recommendations.

### • Brain Stroke Prediction Project

Mar. 2023 - Apr. 2023

HTML, CSS, Javascript, Python, Data Processing, XGBoost, SMOTE

Live App | Github

- Developed a stroke prediction ML pipeline with 100% accuracy using custom sampling and boosting.
- Enhanced classifier performance on imbalanced datasets using undersampling, oversampling, and SMOTE.

# SKILLS

- Core Competencies: DSA, AI/ML, DBMS, Web/App Dev., CI/CD Pipelines, Automation, NLP
- Programming: Python, C, C++, SQL, Javascript
- Libraries and Frameworks: Pandas, NumPy, Matplotlib, Scikit-learn, TensorFlow, PyTorch, FastAPI, Django
- DevOps and Version Control: Docker, Jenkins, Git

# ACHIEVEMENTS

- LinkedIn Recommendation: Recognized by Head of AI/ML, Instagram Creators for developing a food recommender system.
- Campus Innovation Challenge: Won at IIT Jodhpur; awarded by Secretary, Ministry of Health & Family Welfare and IIT Jodhpur Director.
- Engineering Design Project Presentation: Presented project to Former ISRO SAC Director, IIT Jodhpur Director, and BITS Pilani Vice Chancellor on IIT Jodhpur's Foundation Day.
- TVS Credit E.P.I.C 5.0 Analytics Challenge: Ranked among Top 160 out of 18,313 participants.
- CodeChef December Long Challenge 2022: Achieved Global Rank 41.

# EXTRACURRICULAR

- General Secretary of Hostel Affairs, G1 Hostel, IIT Jodhpur
- Adminstration Team Member, Office of International Relations, IIT Jodhpur
- Department UG Committee member, Department of Electrical Engineering, IIT Jodhpur
- Assistant Head, Finance Team, Varchas Annual Sports Fest, IIT Jodhpur