# **Malay Jain**

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#### **Education**

Course B.Tech	Institute Sagar Institute of Research and Technology, Bhopal	<b>Domain</b> AIML	<b>Year</b> 2026	Percentage/CGPA 7.61
12th	St. Joseph's Convent S.S. School, Sagar	PCM	2022	84.2%
10h	St. Joseph's Convent S.S. School, Sagar	All	2020	76.8%

#### **Projects**

#### **Cardiovascular Disease Name Prediction**

- **Overview**: This model supports early detection and diagnosis of heart disease types, enabling more accurate treatment decisions and proactive healthcare. It can serve as a foundational tool in clinical decision support systems to assist healthcare providers with diagnosis and improve patient outcomes.
- Dataset Engineering: Preprocessed heart disease dataset and encoded categorical variable.
- ML Model: Implemented Random Forest Classifier with Gini criterion and optimized parameters.
- Deployment: Deployed the prototype model using Streamlit, a library of python.
- Performance Metrics:
   1) Precision/Recall: 100%
   2) Weighted Average Accuracy: 81%

### **Expert - Candidate Matching System**

- **Overview:** This model streamlines expert selection by providing precise, automated candidate-expert matching, saving time and improving relevance. It enhances decision-making in interviews and mentorships with data-driven recommendations tailored to candidate profiles, benefiting organizations.
- **Using NLP:** Utilized NLP techniques **(SpaCy NER)** to extract key phrases from expert and candidate profiles, focusing on qualifications, skills, research areas, and professional accomplishments.
- **BRET Algorithm:** Integrated BERT-based embeddings **(Sentence-BERT)** to generate semantic representations of profiles, enabling precise similarity calculations.
- Applied cosine similarity to rank and recommend the top 5 most relevant experts for each candidate.

## Food Waste Management System (Secured Top 5 at MANIT Hackthon)

- **Overview:** Designed a predictive system focused on minimizing food waste in hostel messes by leveraging data analytics, machine learning, and inventory management.
- **System Development:** Created a food waste reduction platform using MySQL, Python, and React, predicting optimal food portions to minimize waste in hostel messes by analyzing consumption patterns.
- **Data Generation Process:** Simulated hostel menu data to reflect realistic consumption and waste patterns, supporting accurate demand forecasting for meal planning and reducing waste through predictive analysis.
- **Predictive Modeling:** Implemented Linear Regression and ARIMA models to forecast meal preparation needs, accurately estimating quantities to reduce food waste by aligning portions with demand.
- API and Inventory Management: Built a Flask API for real-time predictions, integrated inventory management to track stock levels, and designed a surplus alert system for NGOs to handle excess food.

## **Community Leadership**

# 1. Google Developers Group Lead (GDG Lead) [Chapter SIRT] Sep 2024- Present

- 2. GeeksForGeeks (GFG) Campus Mantri Apr 2024- Present
  - **Event Organization and Leadership:** Organized and led workshops, hackathons, and technical events on diverse technologies, fostering hands-on learning and increasing participant engagement.
  - **Strategic Marketing Initiatives:** Developed and executed strategic marketing initiatives across multiple platforms, boosting event attendance and cultivating an active tech community.
  - **Project-Based Learning Facilitation:** Project-based learning for students, enhancing their proficiency in various technologies while incorporating relevant industry courses to develop practical skills.
  - **Personalized Guidance and Support:** Provided tailored guidance to help members achieve project milestones, enhance their learning journeys, and build technical confidence.

#### **Skills**

- Technical Languages: Python, C++, C, SQL
- Frameworks: Flask, TensorFlow
- Tools: VS Code, Jupyter, MySQL, Power BI, Streamlit

### Strengths

- Hardworking
- · Critical Decision Thinking
- Leadership
- Communication Skills

# Certifications:

Data Science: NPTEL

• Python: HackerRank

• SQL: HackerRank

#### **Hobbies**

- Reading
- Travel
- · Painting and Sketching
- Music