

MOHAMMAD ZAKIY RIYAZ | DATA ANALYST

✉ zakiyriyaz1@gmail.com

☎ +91-9947552538

🔗 GitHub | zakiyriyaz1

EDUCATION

Asia Pacific University | De 'Montford University

Feb 2024 – Feb 2025

Master's in Data Science and Business Analytics | CGPA: 3.48/4.00

Manipal International University Malaysia

Mar 2019 – Aug 2023

Bachelor of Computer Science (Hons)

PROJECTS

Early Heart Disease Detection in Asymptomatic Young Men Using Predictive ML Techniques

- **Pre-processed and cleaned 60k+ clinical records** (outlier removal, percentile trimming, SMOTE, etc) to focus on **asymptomatic men <45** for targeted CVD risk analysis.
- Identified **cholesterol, systolic BP, and BMI** as top predictors via **EDA, statistical tests and causal analysis (Propensity Score Matching)**; confirming cholesterol increased CVD risk by **15pp (ATT)**.
- Built and optimized ML models (**Logistic Regression, XGBoost, Random Forest, SVMs, Neural Networks**), comparing performances using **accuracy, precision, ROC-AUC and F1 scores**.
- Enhanced **AdaBoost** with **hyperparameter tuning & threshold calibration**, improving recall of true CVD cases by **+9%** while maintaining **79%** accuracy.
- Developed a basic **Python-based dashboard** showcasing risk scores for patient stratification (low/medium/high risk).

Medical AI Bot with Report Generation and Patient Health Tracking

- Built a **Flask-based** medical chatbot using the **Chatterbot library and NLP techniques** (TF-IDF, cosine similarity) to provide patient symptom analysis and interactive consultations.
- Integrated a **image classification POC** using **YOLO** for burn wound detection, demonstrating the potential of **computer vision** in augmenting text-based consultations
- Automated **patient report generation** with progress-tracking to streamline diagnosis, recovery monitoring, and doctor–patient information sharing.
- Developed a **full-stack web interface (Python, Flask, JavaScript, HTML/CSS)** enabling patients and doctors to interact with the bot, access records, and retrieve reports seamlessly.

EXPERIENCE

Project Associate, SUPA

Sept 2021 - Jan 2022

- Oversaw **AI data annotation projects**, managing annotators tasks and ensuring **timely, high-quality delivery**.
- Conducted **QA/QC** and provided **actionable feedback**, improving data accuracy and workflow efficiency by **15–20%**.
- **Independently managed projects** end-to-end, reducing project turnaround time and demonstrating **strong problem-solving skills**.
- **Automated tracking and reporting** in Excel/Google Sheets, eliminating manual errors and accelerating timesheet processing by **30%**.
- Developed a **task allocation and error detection system**, improving team productivity and reducing bottlenecks.

Web Development Intern, Manipal International University

Sept 2020 - Dec 2020

- **Led a team** of 3 developers to plan, design, and implement a Passport and Visa Control System for international students, **improving on-time passport renewals by 14%**.
- Developed a **tracking functionality** for visa expiration and renewal dates, reducing late renewals and follow-ups.
- Conducted thorough **testing and debugging**, solving **100%** of software issues to ensure smooth app performance.
- Produced **clear documentation and code guidelines**, cutting time spent on code review and facilitating team collaboration.

SKILLS

- **Programming Languages:** *Python, R, SQL, C, C++, Java, JavaScript, HTML/CSS*
- **Tools:** *Power BI, Tableau, SAS, SPSS, GitHub, Colabs, Excel*
- **Skills:** *Machine Learning, NLP, Computer Vision, Web Development, Product Strategy, User Research, Agile*