

Life-Expectancy-ML-Project

By

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1. Problem Statement

The goal of this project is to build a machine learning model to accurately predict a country's life expectancy. By analyzing various health, economic, and social factors, we aim to uncover key drivers of life expectancy and provide a predictive tool.

2. Dataset Name and Link

- **Dataset Name:** Global Life Expectancy Dataset
- **Source Link:** <https://www.kaggle.com/datasets/kumarajarshi/life-expectancy-who>

3. Project Objectives

- To perform a thorough Exploratory Data Analysis (EDA) to understand the dataset.
- To preprocess and prepare the data for machine learning, including handling missing values and categorical features.
- To build and train a Linear Regression model for life expectancy prediction.
- To deploy the trained model as a RESTful API using FastAPI.

4. Why We Chose This Topic

We chose this topic because of its significant real-world application in public health and policy-making. Understanding the factors that influence life expectancy can help countries focus their resources effectively to improve the health and well-being of their populations.