1/ Introduction

Many individuals strive to improve their fitness and health, yet face challenges in accurately understanding the calories they burn during various exercises and how to optimize their physical performance based on personal data. This project aims to develop a system that accurately predicts the calories burned and provides recommendations to enhance health and fitness.

2/ Problem Statement

Relying on inaccurate or generalized methods for calculating burned calories can lead to imprecise results, limiting the effectiveness of fitness and training plans. This project addresses the problem by improving the accuracy of calorie burn estimates using personalized information and specific exercise data for each person, as well as offering customized recommendations that help individuals achieve their fitness goals more effectively.

3/ Goals

This project aims to:

1. Develop an AI-based prediction model to accurately estimate burned calories.

2. Provide personalized recommendations for users based on their personal data and health goals.

3. Enable individuals to better understand and improve their lifestyle habits.

4. Increase awareness of the importance of monitoring calorie burn and the impact of exercise on overall health.

4/ Related Work

There are various applications and tools that assist in tracking calories, such as smartwatches and fitness tracking apps. However, many of these solutions rely on generalized calculations, often resulting in inaccurate outcomes that do not align with individual needs. Our project differentiates

itself by using AI to make predictions more personalized and accurate based on each user's personal data, representing an advancement over existing solutions in this field.