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ML Project

Dr. Eslami

Project Title: Horse Riding Talent Detection System

This project focuses on designing a web-based machine learning system for talent detection in horse riding. The goal is to analyze physical and behavioral characteristics of individuals and recommend suitability for equestrian sports using artificial intelligence techniques.
In the first stage, textual data such as age, height, weight, balance, and sport experience are collected from users. These inputs are processed using a rule-based scoring model to estimate the individual's potential in horse riding.
In the second stage, pose detection is applied using video data. MediaPipe Pose is used to extract body landmarks and evaluate posture stability, balance, and body alignment, which are essential skills in horse riding.
The system is implemented as a web application using Flask for the backend and HTML, CSS, and JavaScript for the frontend. The project demonstrates how machine learning and computer vision can be applied to sports talent identification.
In conclusion, the proposed system provides an effective and extendable solution for equestrian talent detection and can be further improved by integrating real competition data and advanced prediction models.