**Foodsmart: an intelligent food recognition and nutritional analysis system**

SE-E-7

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Maintaining balanced nutrition is challenging due to the complexity of modern dietary choices. The "FoodSmart" application addresses this by utilizing advanced computer vision techniques, specifically the YOLO model, to enable accurate identification of food items from user-uploaded images. It provides instant nutritional insights, including calorie count and ingredient analysis, allowing users to track their dietary balance effectively. Unlike other apps that offer generic recommendations, "FoodSmart" further personalizes the user experience through tailored nutritional advice and healthy lifestyle tips generated via integration with LLM. Designed with an intuitive and accessible interface, “FoodSmart” aims to promote healthier eating habits, enhance nutritional awareness, and support sustained improvements in users’ overall health.

Keywords: calorie count, computer vision, dietary balance, nutritional advice, yolo.