Morgan Bergen

Professor Huabo Lu

CS 598 Senior Design Project I

15 September 2024

Clarity Advanced Machine Learning for Nutritional Analysis and Healthcare Management

Describe your Project

Clarity is an interoperable web and mobile application that utilizes machine learning to analyze the nutritional content of captured food in order to provide a comprehensive health management tool and data extraction option to be provided to their healthcare provider and insurer. Clarity is designed to empower users with real time dietary insights to transform the way individuals manage their chronic conditions, nutrition, performance, and overall health. Clarity aims to benefit patients with chronic conditions who wish to better manage their health, insured individuals who desire to decrease their premiums, athletes and personal trainees to want to optimize their performance and health conscious individuals who are inclined to better manage their nutrition. Users create an account, input basic health information, and upload images or scan barcodes of their meals within the mobile application, in turn dashboards are generated within the mobile and web app containing the following targets nutritional analysis and insights, personalized dietary recommendations, health monitoring and trend analysis, disease risk management, data sharing with healthcare providers, reduce healthcare costs, support athletic performance and personal training…

Describe Core Features

Group Name

Group Formation - Christal Shaner, Jason Heitman, Morgan Bergen

Programming Experience

Link to Github Profile - @ChristalShaner, @MorganBergen, @BlazingEmerald