Sustainable Eating to Save Our Planet

Kolachina, Roshan (School: McIntosh High School)

As temperatures near 1.5 degrees Celsius above pre-industrial times, scientists warn that the Earth will start seeing some of the most catastrophic effects of climate change. News headlines are already filled with extreme weather events from climate change: all but three of the top 20 fires in California have happened in the last three years; in 2020, scientists ran out of names for tropical storms and had to turn to the backup Greek alphabet, and 2021 followed suit. It is imperative that immediate change must be brought to reduce greenhouse gas emissions and mitigate climate change before further detrimental effects are observed. A significant part of an American's carbon footprint stems from their eating habits-- a daily event every American partakes in. Findings from research I conducted last year showed that if the entire US population were to align their diets with the USDA's recommendations, it would be equivalent to having approximately 82M fewer cars on US roads. In this phase of the project, I developed a mobile application that packages the information obtained in phase 1 and assists individuals with transitioning into eating more sustainable diets. The application allows users to log their meals and view the greenhouse gas emissions associated with the production of their meals. Additionally, users have access to past-logged meals, allowing them to view daily, weekly, and monthly trends to track progress. My application leverages the advantages of self-monitoring apps with a focus on sustainable eating, enabling users to eat more sustainably.

Awards Won: