

Our project is dedicated to exploring how artificial intelligence (AI) can guide people toward making more sustainable food choices. We all know that our food system has a big impact on the environment. Issues like climate change, deforestation, and loss of biodiversity are heavily influenced by the way we produce and consume food. By focusing on how AI can help us choose foods that are better for the planet, this project aims to contribute to a healthier environment and a more sustainable future for everyone.

## Project Goal

The main goal of this project is to understand how personalized AI recommendations can encourage people to make food choices that are kinder to the environment. We want to see how AI can help make it easier for people to identify and choose sustainable food products, guiding them towards options that have a lower environmental impact.

## Description of Research

We will be using a variety of advanced research methods to see how people react to AI recommendations. This includes:

- **Focus Groups:** We will talk to different groups of people to learn about the challenges they face when trying to make sustainable food choices. This helps us understand what information they need to make better decisions.
- **Eye-Tracking Studies:** We will look at how people read food labels and what catches their eye. This will help us understand which sustainability labels are most effective in grabbing attention.
- **EEG Studies:** By monitoring brain activity, we can see how people's brains react to AI-generated recommendations. This will tell us how AI influences their decision-making processes.
- **Surveys:** We'll ask a lot of people about their attitudes toward sustainability and how much they know about sustainable practices. This will help us see how these factors affect their food choices.
- **Shopping Behavior Analysis:** In a real store setting, we'll see how people use AI tools on their phones to get real-time advice about the sustainability of different products. We'll observe how this influences their shopping decisions.

## Reasons for Attempting This Research

Our research is motivated by the need to make sustainable food choices easier and more accessible for everyone. Many people want to make more environmentally friendly choices but find it hard to understand what makes a product sustainable. Labels can be confusing, and the information is often overwhelming. AI has the potential to simplify this process by providing clear, personalized recommendations. By making it easier for people to understand and choose sustainable options, we hope to reduce the environmental impact of our food system and contribute to a more sustainable future.

## Substantial Results Expected

We expect to achieve several important outcomes from this project. First, we aim to develop AI tools that provide personalized and easy-to-understand recommendations, making it simpler for people to choose sustainable food products. We also hope to identify which types of sustainability information are most effective in influencing people's choices. This could lead to better labeling practices and more informed consumers. Ultimately, our goal is to help people make choices that support a healthier planet and encourage more sustainable consumption patterns. By demonstrating the effectiveness of AI in promoting sustainable choices, we hope to inspire wider use of this technology in other areas of our lives.