# What motivated you to choose this topic for your capstone project?

The motivation behind choosing the topic of "Crop Scanning & Disease Detection" appears to be the significance of Farming in global agriculture and the persistent threats it faces from various diseases. Traditional methods of disease detection have been inefficient, prompting a need for an innovative approach to disease management in tomato cultivation.

# Can you describe the dataset you worked with? Where did you source it from?

I have downloaded the dataset from Kaggle. It has necessary images for leaf disease detection. It includes affected and non-affected leaves.

# Which algorithms or models did you consider? Why did you choose the one(s) you used?

The models mentioned in the extracted text are 3D YOLOv4 and 3D U-Net. 3D YOLOv4 was used for object detection of leaves, and 3D U-Net was utilized for disease detection.

# Which tools, libraries, or frameworks did you use for this project?

The project utilized advanced technologies like 3D modeling and deep learning, with tools and frameworks such as Blender and Unity.

# What were the key findings or outcomes from your project?

The project was successfully built end-to-end, enabling farmers to upload images directly from their phone or a drone equipped with a LiDAR camera. This provides real-time scanning and detailed visualization capabilities for managing plant health and detecting diseases.

# Who are the end-users of your project, and how can they benefit from it?

The project entails the development of a user-friendly iPhone app that provides real-time scanning and 3D visualization of plant health and disease status. Although the exact end-users are not specified, it can be inferred that farmers, agricultural workers, and anyone involved in tomato cultivation might benefit from this application by having a tool that allows them to efficiently and precisely detect and manage diseases in tomato plants.