



North East University Bangladesh

Project Proposal

Course Code: CSE 460

Course Title: Lab on Contemporary Course on Computer Science & Engineering

Submitted to:

Razorshi Prozzwal Talukder

Lecturer

Department of CSE

North East University Bangladesh

Submitted by:

Jannatul Ferdous Jannah

ID: 200103020003

Mansura Mokbul

ID: 200103020028

10th Semester

Department of CSE

North East University Bangladesh.

Submitted Date: August 19, 2023

Title: Ingredients Generation from Food Image

Goal: Our goal is to develop a system that can generate a title and ingredients based on an image of food.

Description: The system will take input from the user to predict the closer title, and ingredients for the input image.

Methodology:

1. Collect a dataset of food images.
2. Preprocess the data and extract features from the food images.
3. Train a deep learning model to generate ingredients from the food images.
P.S. Since there are many different deep learning models available, we have not yet decided which model we will use. However, we might use Generative Adversarial Networks (GANs) or Transformer model.
4. Evaluate the performance of the model by measuring its accuracy in generating ingredients that match the ground truth ingredients.
5. Deploy the model by using a framework like Flask or python based library like Streamlit.

Dataset: [Food101](#) contains a large amount of data, therefore we will minimize it by ourselves.