

VERSION 1 OCT 22, 2023

Protocol to Capture, Annotate, and Grade produce items using the AI enabled Grader App V.1

Anjali Sharma^{1,2,3}

¹LIME Lab Low Profit LLC; ²SDG Labs; ³The Roeper School

Anjali Sharma: CEO of LIME Lab and SDG Labs;

SDG Labs



Anjali Sharma

LIME Lab Low Profit LLC, The Roeper School, Michigan

OPEN ACCESS



DOI:

dx.doi.org/10.17504/protocol s.io.e6nvwd879lmk/v1

Protocol Citation: Anjali Sharma 2023. Protocol to Capture, Annotate, and Grade produce items using the AI enabled Grader App.

protocols.io

https://dx.doi.org/10.17504/protocols.io.e6nvwd879lmk/v1

License: This is an open access protocol distributed under the terms of the Creative Commons
Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working We use this protocol and it's working

Oct 22 2023

Created: Oct 22, 2023

Last Modified: Oct 22, 2023

PROTOCOL integer ID:

89714

This protocol is intended for use by citizen scientists utilizing the Grader App developed by Anjali Sharma. By using this mobile app and following the instructions outlined in this protocol, users acknowledge and agree to the following:

User Responsibility: Users of the app are solely responsible for their own safety while using the app. They should exercise caution and follow all safety guidelines and regulations applicable to the use of mobile devices, particularly in environments where capturing images may involve risks.

No Liability: Anjali Sharma, SDG Labs, LIME Lab Low Profit LLC (LIME Lab hereafter), and any associated institutions or individuals assume no liability for any accidents, injuries, damages, or losses that may occur while using the app. Users accept full responsibility for their actions and use the app at their own risk.

No Warranties: This protocol and the accompanying mobile app are provided "as-is," without any warranties, either expressed or implied. Anjali Sharma, SDG Labs, LIME Lab, and associated institutions do not guarantee the accuracy, reliability, or suitability of the app for any particular purpose.

User Discretion: Users are encouraged to exercise their own discretion and judgment when using the app. They should take into consideration the specific circumstances and risks associated with capturing images of produce items, and act accordingly to ensure their safety and the safety of others.

Indemnification: Users agree to indemnify and hold harmless Anjali Sharma, SDG Labs, LIME Lab, and associated institutions, their officers, employees, and affiliates from any claims, liabilities, damages, or expenses arising from their use of the app, including any violation of applicable laws or regulations. By using the Grader App, users acknowledge that they have read, understood, and accepted this disclaimer in its entirety. If users do not agree with any part of this disclaimer, they should refrain from using the app.

ABSTRACT

This protocol describes steps to capture, annotate, and label produce items as good or bad using the Grader App. The grader app is part of a larger system of systems conceived, designed, and developed by **Anjali Sharma at SDG Labs**, to reduce food waste using Al and robotics. The grader app is designed to leverage the power of citizen sourcing and Al to create an open image data set of good and bad produce items. The purpose of creating this open image data set is to help in training machine vision algorithms that can accurately differentiate between good and bad produce items. In this protocol I outline the steps following which, any citizen scientist can capture, annotate, and/or label good and bad produce items.

MATERIALS

Smart Phone, Internet Connection, Grader App, Sufficient Lighting, Internet Connection