# Fruit Finder Grading Rubric Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

CSSE 463—Image Recognition

| Criteria  (weight) | 5  Exemplary | 3  Satisfactory | 1  Needs Improve. | Score (Weighted) |
| --- | --- | --- | --- | --- |
| Abstract (x1) | Concise summary of the paper with details and precise results in a single paragraph | Summarizes the paper, but is somewhat vague. | Vague |  |
| Intro /Problem Statement (x1) | Document clearly describes the problem, Explicitly answers 3 questions in detail: Why is the problem interesting? Why is it challenging? What is interesting about the proposed solution? | Answers the 3 questions, but with little detail. | Document briefly introduce the  problem without addressing the questions. |  |
| Discussion of Process (x3) | Document clearly describes the process followed, including preprocessing (HSV), initial classification and thresholds used, and post-processing (exact morphological operators and structure elements and why they were chosen). All intermediate images interwoven. | Document describes the overall process followed, but omits a few details. | Document fails to describe the overall process followed. |  |
| Initial classification in HSV space (x3) | Solid effort finding accurate thresholds between fruit colors. Initial classification shown for each fruit in each image. | Reasonable attempt at finding good thresholds. | Thresholds are inaccurate and produce results that cannot be cleaned up. |  |
| Aggregation of fruit pixels & post-processing (x4) | Uses appropriate morphological operations to identify pieces of fruit accurately on the 3 test images. Results shown for each fruit in each image. | Uses morphological operations to aggregate fruit pixels, but sizes very different from originals. | Little or no evidence of aggregating fruit pixels. |  |
| Fruit statistics (x2) | Includes table of correct number, reasonable centroids and sizes of fruit in the first 3 test images (not including fruit\_tray) | Some fruit missing or non-fruit found, reasonable locations in the first 3 test images. | Many fruit or locations missing |  |
| Discussion  (x3) | Includes intelligent evaluation of your algorithm’s performance (both strengths and weaknesses and how to address weaknesses), next steps to take, given more time, both in the short-term (2-3 weeks) and long-term (up to a year). Results on fruit\_tray shown and discussed. | Same, but minor details missing. | Document doesn’t document clear thoughts about results and future work. |  |
| Writing mechanics (x1) | Successfully proofread. Document is free of typos and errors in spelling, grammar and punctuation. | Document has a small number of errors in spelling, grammar, or punctuation. | Document has many errors in spelling, grammar, and punctuation. |  |
| Organization (x1) | Well-organized in a clear, easy-to-read manner like a conference paper or technical report. . Section headers used. Long sections have subheadings. Writing is professional, clear and unambiguous, not unnecessarily wordy. Slang (e.g., “a lot”) not used. | Formatted clearly, but some parts difficult to follow due to formatting. | Difficult to follow |  |
| Aesthetics (x1) | All images and tables nicely formatted. Spacing consistent. No widow/orphan headers. | Minor issues | Document looks sloppy |  |

Code not submitted: 0% Total score: %

Comments: