# Sunset Detector, Part 1 Rubric Name(s):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

CSSE 463—Image Recognition

Updated for 2018

| Criteria  (weight) | 5 Exemplary | 3 Satisfactory | 1  Needs Improv. | Score (Weighted) |
| --- | --- | --- | --- | --- |
| Abstract (x1) | Concise summary of the paper with details and precise results in a single paragraph | Summarizes the paper, but missing parts or little detail. | Vague |  |
| Introduction (x1) | Document grabs attention and explicitly answers 3 questions in detail (several paragraphs): Why is the problem interesting? Why is it challenging? Why is the proposed solution interesting? Places the problem in its larger context. Sets the scope (inputs and expected outputs). Includes at least one image. | Answers the 3 questions, but with less detail. | Document briefly introduces the  problem without addressing the questions. |  |
| Feature  extraction (x4) | Document describes of feature extraction process (with an example image). Correctly calculates features on a 7x7 grid. Conversion to LST is accurate. Another could replicate your work from the detail given. | Minor error(s) in calculations that does not appear to impact classification accuracy greatly, or details missing in report. | Error that causes substantial errors in classification, or vague description in report. |  |
| SVM  classification (x3) | Clear evidence in report of experimenting with kernel hyper-parameters. Evidence (a table or figure) that the hyper-parameters chosen for the final classification are optimal (or reasonably close). Standardization is used to weight features equally. | Tried few hyper-parameters and chose best, but didn’t keep trying. For ex., accuracy using values of 3 and 5 higher than with 3, but never checked 4. | Chose parameters or kernel without evidence that they are better than others. |  |
| Experimental setup & results  (x4) | Includes description of experimental setup. Final results on the test set shown in an ROC curve. Enough details so your work could be replicated. | Missing some details. Like ROC curve missing. | Vague or incomplete |  |
| Discussion  (x4) | Includes simplifying assumptions made, intelligent evaluation of your system’s performance (success & failure images shown and each discussed), and next steps to take, given more time, both in the short- (2-3 weeks) and long-term (up to a year). | Same, but minor details missing like if little future work. | Document doesn’t document clear thoughts about results and future work. |  |
| Writing mech. and proofing (x1) | Document is free of typos and errors in writing mechanics: spelling, grammar and punctuation. | Document has a small number of such errors. | Document has many such errors. |  |
| Professional writing style (x1) | Writing is professional, clear and unambiguous, not unnecessarily wordy. Slang (e.g., “a lot”, second-person “you”) not used. Passive voice not abused. | Fairly easy to follow. Word choice is informal or wordy or includes slang. | Difficult to follow or very informal. |  |
| Aesthetics and organization (x1) | Organized & formatted like a conference paper. All figures, tables, and equations are numbered, nicely sized and formatted, and correctly cited in the text. No widow/orphan headers. | Minor issues | Document looks sloppy |  |

If no code submitted, 0% Total score = \_\_\_\_\_\_\_%

Comments: