Term Project: Automatic Detection of Sub-Kilometer Craters in High Resolution Planetary

Assigned Date: Thursday, March 26, 2009

Progress Report Date: 7:00 PM Wednesday, April 15, 2009

Final Report Due Date: 7:00 PM Monday May 18, 2009

Presentation Date: Wednesday May 20, 2009

Educational Goal

Apply spatial data mining techniques to real-world applications.

Phase I: Project Plan

Due: 7:00 PM Wednesday April 1, 2009

Requirements

- Two training datasets are available at the UMass Online Course website (Assignment→Term Project – data sets). Download the files and open the files using Weka to see all the attributes and values. **hrsccandidatesmasterv0.arff** is the training data set used in the paper "Automatic detection of sub-kilometer craters in high resolution planetary images."
    1. **hrsccandidatesmasterv0.arff** training data set includes 126 objects
    2. **hrsccandidatesmasterv2.arff** training data set includes 2611 objects
- Submit a project plan for your term project. Set up a plan for each week to discuss specifically how to improve the accuracy rate of the crater detection. The project plan should descript the job assignments for each team member. The project plan is graded based on how specific and detailed the plan is and how practical the plan can be implemented.

Submission Requirements

1. One submission per team. Save the file as sdm_ teamNumber. For example, Team 1 should name their file as *sdm_team1.docx*.
2. Submit the softcopy through your UMassOnline account at http://boston.umassonline.net/index.cfm.
3. Submit the paper copy along with the cover page in class. Paper copy should be bound firmly together as one pack (for example, staple, but not limited to, at the left corner). 5 points will be deducted for unbounded homework.

4. No hard copies or soft copies results in 0 points.