A Framework for Visualizing, Analyzing and Mining Imagery using GLIDER

Sara Graves, Rahul Ramachandran, Todd Berendes
Information Technology and Systems Center
University of Alabama in Huntsville
sgraves@itsc.uah.edu

GLIDER is an easy to use software tool for visualization, analysis and mining of satellite imagery. Users can visualize and analyze imagery in its native sensor view, an important capability since any transformation to either a geographic coordinate system or any projected coordinate system requires spatial and intensity interpolation. With GLIDER, users have access to a full suite of image processing algorithms for satellite imagery enhancement, as well as pattern recognition and data mining algorithms for both parametric and non-parametric information extraction. GLIDER can also be used to project satellite data and the analysis/mining results onto a 3D globe and overlay additional data layers. This presentation will describe the architecture of GLIDER along with some case studies that illustrate some of the available features.