CS Masters' Thesis Defense

Title: *Image Edge Detection Using Ant Colony Optimization Algorithm*
Speaker: Sunjna Kashyap
Date: Tuesday, April 24, 2012
Time: 10:00 a.m.
Location: GMCS 418
Thesis advisor: Dr Joseph Lewis

Abstract:
Ant colony optimization (ACO) is an optimization algorithm inspired by the natural behavior of ant species, which deposit pheromone on the ground to guide their foraging. In this paper, the algorithm proposed by Jing Tian for edge detection using ant colony optimization is proposed. The experimental results obtained through the implementation are matched with the author's results to verify the claim to be true. The proposed ACO-based edge detection algorithm represents the edge pixel position of the image using a pheromone matrix in which the movements of the ants driven by the image's intensity values are recorded.