POSITION AVAILABLE
Center for Biological & Computational Learning, E25-201
Dept. of Brain & Cognitive Sciences, MIT

Position: Daimler Fellow

Project Title: Daimler Project - “Object-recognition from Partially Labeled Examples”

Description: The goal of this project is to develop an object-recognition system that can improve "by itself" using unlabeled examples. We have developed and are continuing to research such algorithms for 'partially-labeled' learning that can use both labeled and unlabeled data. This project focuses on applying and adapting the algorithms to the domain of object recognition. Specifically, we will use images and video sequences from cameras mounted in a car: future cars will have to automatically recognize cars, trucks, bicycles, pedestrians and other objects on the road. Specifically, we will need to process images to extract features useful for recognition. Then, we will run experiments with existing and new classifiers. We need initial results within a three-month period.

Requirements: The applicant must know Matlab and Visual C++ well; experience with numeric programming is also useful. To work on this project, he/she needs to have experience with machine vision and machine learning. (This project is suitable for an advanced undergraduate, masters or beginning Ph.D. student.)

Start Time: As soon as possible.

Duration: 1/1/02-12/31/02 (extension possible)

Contact Person: Martin Szummer (szummer@ai.mit.edu)