The Parallel Distributed Processing Laboratory supports research in signal/image processing and recognition, neural networks, support vector machines, decision trees and other adaptive systems, and investigation of statistical algorithms, especially in solving real-time problems.

A major direction of focus has been compact PC-based parallel and/or DSP-based systems for solving practical problems such as detecting crops versus noncrops in agriculture in cooperation with the School of Agriculture at Purdue University. This involves use of systems such as a multispectral camera for the generation of multispectral image database, image processing, neural networks, support vector machines, decision trees, and statistical techniques, for example, implemented in a parallel CNAPS system embedded in a Pentium PC and/or image grabbing boards based on very fast DSP chips, as well as compact camera systems equipped with CPU and memory.

The laboratory is also used together with other parallel processing facilities such as the ELLPACK Laboratory at Purdue University.

For more information contact Prof. Okan Ersoy.
Tel: (765) 494-6162
E-mail: ersoy@purdue.edu