

# Imaging Measurement Control Trainer



## Overview

IMCT001 is a training setup intended for teaching courses in image processing and motion control, as well as a tool for practicing simple artificial intelligence tasks.

Students can use this easy and interactive setup to learn image processing algorithms including: edge detection, pattern matching...etc. and using these algorithms to find the open path in a maze. Moreover, the students can learn how to drive and control motors and how to combine imaging and motion control to build real life applications.

Developed for use with a wide variety of National Instruments image acquisition and motion control platforms.

## Features

- Computer based Imaging and Motion Control Trainer used to teach image acquisition, analysis, processing & control
- Includes all required cameras and actuators to perform the experiment list
- For use with National Instruments Data Acquisition & Control hardware

## Required Hardware and Software

- MS windows -2000/XP/Vista/Windows7, Microsoft office
- Compatible with National Instruments' data acquisition hardware (cRIO)
- PC with monitor

# Imaging Measurement Control Trainer

## List of labs

1. Image Acquisition
2. Image Analysis & Processing
3. PID Control
4. Motors Drive & Control
5. Machine Vision Applications

## Components

- Image Acquisition
- Image Analysis & Processing
- PID Control
- Motors Drive & Control
- Machine Vision Applications

