During the 2011-12 citrus season, UF/IFAS Agricultural Engineers at CREC and Gainesville investigated machine vision devices as part of an effort to develop an advanced citrus yield mapping system. Drs. Won Suk “Daniel” Lee and Reza Ehsani, along with their graduate student Junsu Shin, built a system that consisted of a CCD color camera with a high frame rate, two lamps, an incremental encoder, and a data acquisition card. A yield mapping system would allow a citrus grower to more efficiently manage for factors such as soil fertility and moisture content, which in turn can affect fruit yield and/or cost of production. More information on yield monitoring and other projects being done by Dr. Ehsani and his team can be found at http://citrusmh.ifas.ufl.edu. Click on “Machine Enhancements.”