Early detection of knee osteoarthritis (OA) is of great interest to orthopaedic surgeons, rheumatologists, radiologists, and researchers because it would allow physicians to provide patients with treatments and advice to slow the onset or progression of the disease. Early detection can be achieved by identifying early changes in selected features of degenerative articular cartilage (AC) using non-invasive imaging modalities. Magnetic resonance imaging (MRI) is becoming the standard for assessment of OA. non-invasive MRI [20–23]. The measurement of changes in cartilage thickness may provide an early indication of degeneration and can be used as morphological features to detect early OA.