Postgraduate student: **Mihalis Sarris**

Thesis Title:

Digital Tomosynthesis of Medical Imaging

Abstract:

Digital radiography is a relatively new occupation in the field of Radiology. The rapid growth created the need to find new techniques to make it easier, but also qualitatively better diagnosis through imaging. With digital tomosynthesis slices taken multiple low dose different angles, which are reconstituted into a series of cuts HDTV, which can be visualized. This method of tomosynthesis reduces false positive or false negative results since eliminated the phenomenon of superimposing different sections. Provided clearer after diagnosis improves the differentiation between benign lesions from malignant lesions and highlights best boundaries in 3D tracking. This thesis will be developed in matlab algorithm implementation of digital tomosynthesis. The algorithm is based on the size of the test section and the different angles from which they radiate. As a result gives us a pretty good quality picture that shows the size and contour of the lesion.

Examining Committee:

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