

Proposition accompanying the thesis

Automatic Patient Modelling for Hyperthermia Treatment Planning of Head and Neck Cancer

by Valerio Fortunati.

1. Automatic tissue segmentation of Head and Neck CT images can be introduced in the clinic for hyperthermia pre-treatment planning and real-time treatment optimization (*This thesis*).
2. Automatic Head and Neck MRI tissue segmentation can replace manual delineation for pre-treatment planning and real-time treatment optimization in clinical practice (*This thesis*).
3. Deformable registration of Head and Neck CT and MR images for radiotherapy treatment yields a better alignment than rigid registration, the current clinical standard (*This thesis*).
4. In radiotherapy, deformable registration of Head and Neck CT and MR images can not compensate for the misalignment that may occur when no immobilization equipment is used (*This thesis*).
5. Automatically generated MR- and CT-based patient models of the Head and Neck region can be used in clinical applications (*This thesis*).
6. Effective planning should only be detailed in the short period, and more general in the long period. It is useless to spend efforts on detailed planning when depending on uncertain future outcomes.
7. Multiple choice questions are not a good choice for examination at any level of education.
8. In Italy, having good connections is much more important than having a good diploma.
9. The most effective actions in martial arts are driven either by instinct or anticipation.
10. Being in a minority, even in a minority of one, did not make you mad. There was truth and there was untruth, and if you clung to the truth even against the whole world, you were not mad (*George Orwell, 1984*).
11. There are things known and things unknown and in between are The Doors (*Ray Manzarek, founding member of The Doors*).

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