



Computational Models for Medical Images

Guest Editor:

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Message from the Guest Editor

The numerical models, can be developed based on medical images, such as CT (computer tomography). These computational models have become important non-invasive diagnostic and treatment tools within the healthcare system. The aim of this Special Issue is to attract high quality research articles focusing on computational modelling in order to explore the latest developments and trends of computational technologies in healthcare engineering via the use of medical images. The topics in this special session include, but are not limited to, the following areas:

- Imaging processing methods to develop computational models;
- Multiphysics and multiscale models developed based on the medical images;
- Evaluation of interventional surgeries such as stents, stents grants, and other implants, etc.;
- Computational fluid dynamics (CFD) and fluid structure interaction (FSI) models for cardiovascular and vascular system;
- CFD and FSI models to simulate the air flow in the respiratory system;
- Finite element (FE) models for human body movement systems, such as hip replacement;
- CFD, FE, and FSI models for sports;
- Digital wins.





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Message from the Editor-in-Chief

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