Medical Image Computing for Translational Biomedical Research

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Medical Image Computing (MIC) is an emerging interdisciplinary field at the intersection of computer science, electrical engineering, physics, mathematics and medicine. The field develops computational and mathematical methods for solving problems pertaining to medical images and their use for biomedical research and clinical care. The main goal of Medical Image Computing is to extract clinically relevant information or knowledge from medical images (from Wikipedia). MIC research is traditionally performed in academic settings and results in working prototypes and demos. There is an increasing need for converting such prototypes into tools that can be used for translational biomedical research. Creating such tools requires modular software architecture and effective interdisciplinary teams. Open source platforms are emerging as an effective solution to translation in MIC.