

Download Computational Intelligence In Biomedical Imaging

Computational Intelligence in Biomedical Imaging Lab. The long-term goal of the laboratory's research is to develop computational-intelligence technologies that learn, from data and examples, experts' knowledge and skills in understanding images in order to make smart decisions. A radiologist's ability to make accurate diagnoses from high-quality diagnostic imaging studies directly impacts patient outcome. However, acquiring sufficient data to generate the best quality imaging comes at a cost – increased radiation dose for computed tomography (CT) and positron emission tomography (PET) or uncomfortably long scan times for magnetic resonance imaging (MRI). In computer science, artificial intelligence (AI), sometimes called machine intelligence, is intelligence demonstrated by machines, in contrast to the natural intelligence displayed by humans and other animals. Computer science defines AI research as the study of "intelligent agents": any device that perceives its environment and takes actions that maximize its chance of successfully achieving ... The Department of Biomedical Informatics is committed to improving biomedical research and clinical care through the innovative application of informatics. Currently funded projects explore areas such as genomic and proteomic data mining, natural language processing, machine learning, and biosurveillance.