

Mirza Faisal Beg

Short Biography:

Dr. Mirza Faisal Beg is a Professor in the School of Engineering Science at Simon Fraser University. He received his Bachelor of Technology (honors) degree in Electrical Engineering at the Indian Institute of Technology (IIT), Kharagpur, his Master of Science degree in Biomedical Engineering from Boston University (USA), and his PhD degree in Biomedical Engineering from the Johns Hopkins University (USA). He was recognized with the SFU Faculty of Applied Science's Excellence in Teaching award (2011), the Association of Professional Engineers and Geoscientists of British Columbia's Meritorious Achievement award (Presidential Award, 2012) for his contributions to engineering and computational tools for advancing technology applicable to human health, and the SFU Faculty of Science Excellence in Research Award (2015). His expertise is in developing novel AI, machine learning, medical imaging analysis, computer vision and signal processing tools and applying them to extract biomedical imaging-based biomarkers for the quantitative understanding of human anatomy structure and function. His current research interests are to elucidate the trajectory of individual organs and tissues in the patient's clinical journey as a function of disease and intervention and build individual-specific prediction models for clinical outcomes integrating demographic, clinical, lifestyle, genomic, imaging and body composition, disease, tumour markers and genomics and clinical interventions and use these models for prediction medicine applications. He is also the Chief Executive and the Chief Scientific Officer of Voronoi Health Analytics Inc., a Vancouver Canada based company that has developed the DAFS software platform for body composition and organ/tissue measurements from CT/PET/MRI images.

Abstract: