

Application of Artificial intelligence and computer vision in Medicine

This presentation will cover how AI and machine learning is starting to change medicine. It will also draw on the work has been done in developing computer aided diagnosis systems to identify, quantify and characterise lesions in medical imaging, particularly for use in cancer research (eg. Colon, lung and breast cancer). It will then focus on the impact machine learning will have on pre-clinical trials and how it speeds up decision making on the success of drug therapies. For this a novel solution for subcutaneous tumour measurement in mice will be presented to provide a good case study of the application of computer vision and machine learning in a pre-clinical trial setting, demonstrating the results and impact on pre-clinical trials that can be achieved.