



How Is Artificial Intelligence Reinventing Healthcare?

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Presentation: Bringing machine learning methods into the medical imaging industry for automation and detection

In this talk, I will discuss the process of taking machine learning methods from a concept, to an R&D prototype and finally a product. This process has a number of challenges including establishing a ground truth, prototyping robust methods, having a framework for user testing and iteration. Finally, I discuss the regulatory and compliance challenges of building a machine learning product for the medical industry.

Tutorial: Deep U-nets for organ segmentation in medical images

In this hands on tutorial, U-shaped networks are used for automatic organ segmentation in medical images. Attendees will be able to run the networks on their own computers and generate automatic organ segmentations. We'll explore the structure of the network, the behaviour of each trained layer and its impact on the final segmentation.

Code and examples will be made available before the summer school. To be actively involved, participants will need their own computer with a Python 3 (e.g. [anaconda.org](https://www.anaconda.org)) distribution installed. Participants are encouraged to familiarise themselves with Python before attending.