

Artificial Intelligence - Medical Scans Analyzer



Medical scans and imaging refers to the creation of visual representations of the inner body for medical analysis and to find ways to assess the function of tissues and organs.

What's the need?

The number of medical images radiologists in emergency rooms analyze on a given day can be extremely overwhelming. Each medical scan taking hundreds if not thousands of pictures taking up large amounts of data that need to be processed. With deep learning and

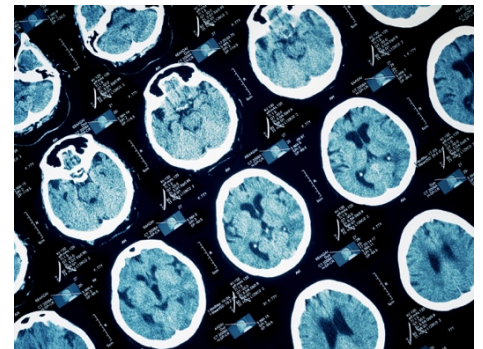
artificial intelligence radiologists are able to sift through data and analyze exams at a much more efficient rate. As a result, a faster and more accurate medical diagnosis can add years to a patient's life.

Examples of the Possibility of AI with Medical Imaging

Deep Learning Cancer Detection – Cancers such as melanoma and breast cancer are highly curable and treatable with a full recovery given that they are detected early. With Deep Learning algorithms characteristics of cancer can be detected with much higher accuracy than that of a radiologist.



MRI Image Processing – Medical image processing alongside computer analysis requires hour of computing time. When it comes to interpreting these images, human error is always present. With deep learning systems are able to identify common anatomical patterns allowing an MRI analysis is less than a second when ran on a GPU.



Tumor Development Tracking – Convolutional Neural Networks (CNN's) can be trained to detect abnormalities in tissue. With deep learning algorithms tumor proliferation can predicted with a tumor probability heatmap, determining the probability of the tumor affecting various tissue patches.

FAU Courses

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