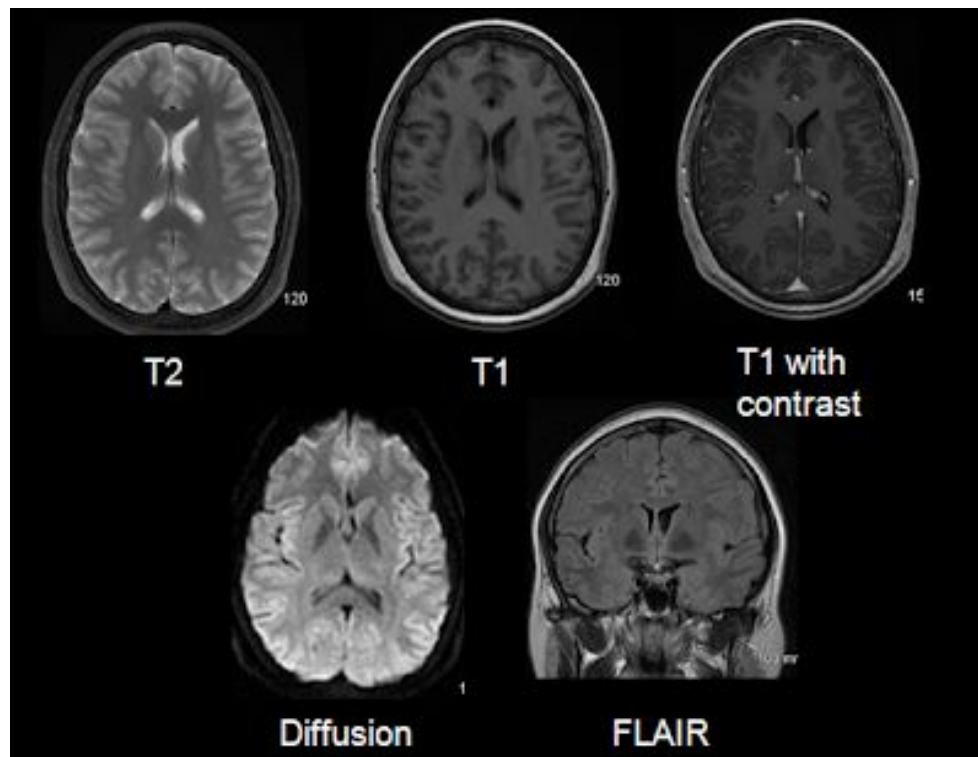


Intelligent Image Analysis Methods in Brain Magnetic Resonance Imaging



In Magnetic Resonance (MR) Imaging, each different type of image is referred to a sequence. The primary MR sequences include T2, T1, T1 with contrast, Diffusion and FLAIR.

(source: <https://sites.google.com/a/wisc.edu/neuroradiology/image-acquisition/the-basics>)

Currently, the most common imaging for neuro studies is Magnetic Resonance (MR) Imaging. In MR imaging, the primary imaging sequences utilized for neuroimaging include T1, T2, T1 with contrast, Diffusion and FLAIR.

Most image analysis methods focus on one of the imaging sequences (T1 or T2) and this project involve utilizing complementary information available in the primary imaging sequences and develop intelligent image analysis methods. The imaging methods will involve collection of data from radiology departments and routine interaction with Radiologists (medical doctors).

Background of Students: Strong Linear/Matrix Algebra and/or signal processing

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