

Disease Progression Analysis of Posterior Cortical Atrophy using a Data-Driven Model

Author:

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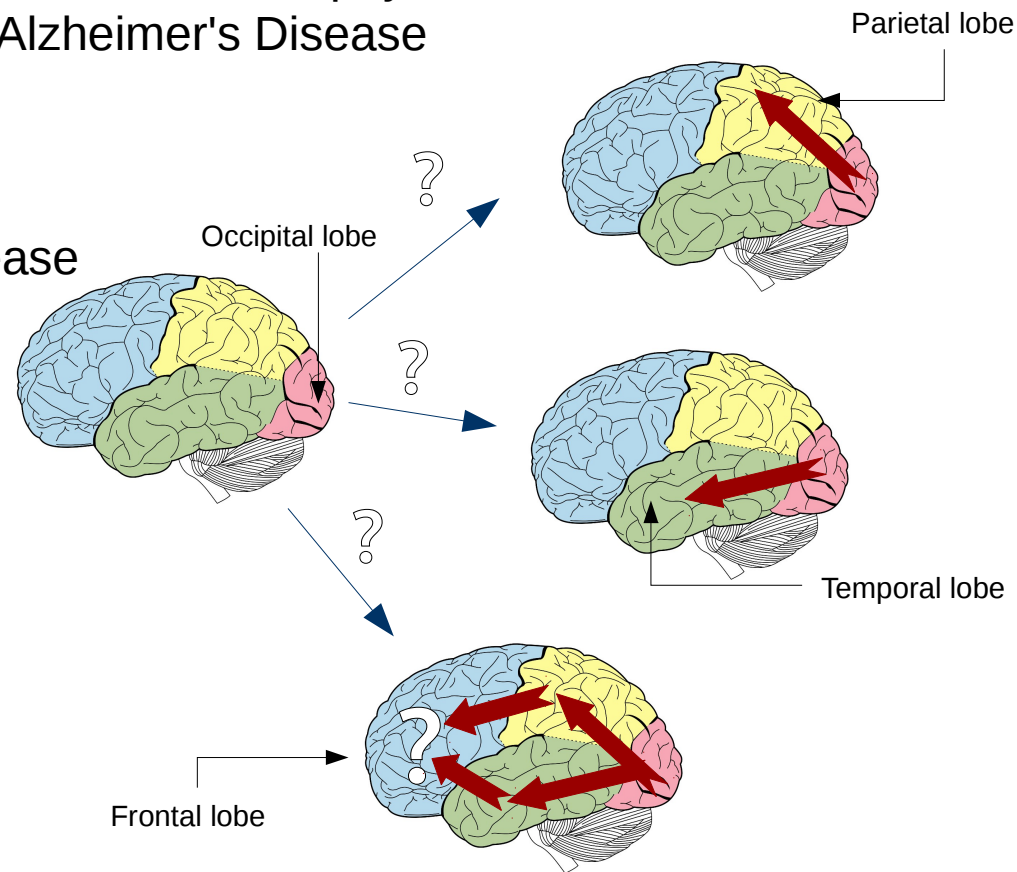
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Motivation

- Analyse the progression of Posterior Cortical Atrophy (PCA), which is a rare subtype of Alzheimer's Disease
- **Why is it important?**
 - Early and accurate diagnosis
 - Identify the causes of the disease
 - Aid drug development



Methods and Results

- Used an event-based statistical model
- Found out the order in which brain regions are affected

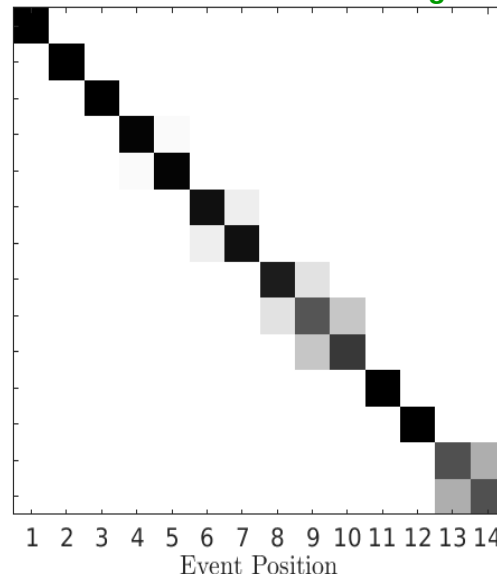
Measurements of
brain regions and
cognitive tests

Sorted by when they
become abnormal

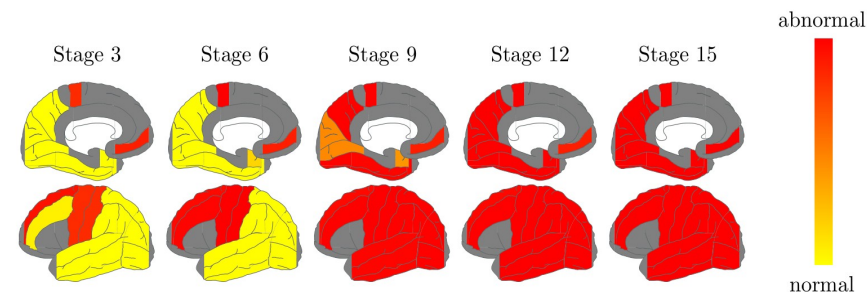
Confidence in the ordering

Ventricles
WholeBrain
RMT words
RMT faces
Sup. Occip. g.
Occip. Fusif. g.
Mid. Occip. g.
VOSP OD
Sup. parietal l.
Hippocampus
Thalamus
Inf. Occip. g.
Arithmetic
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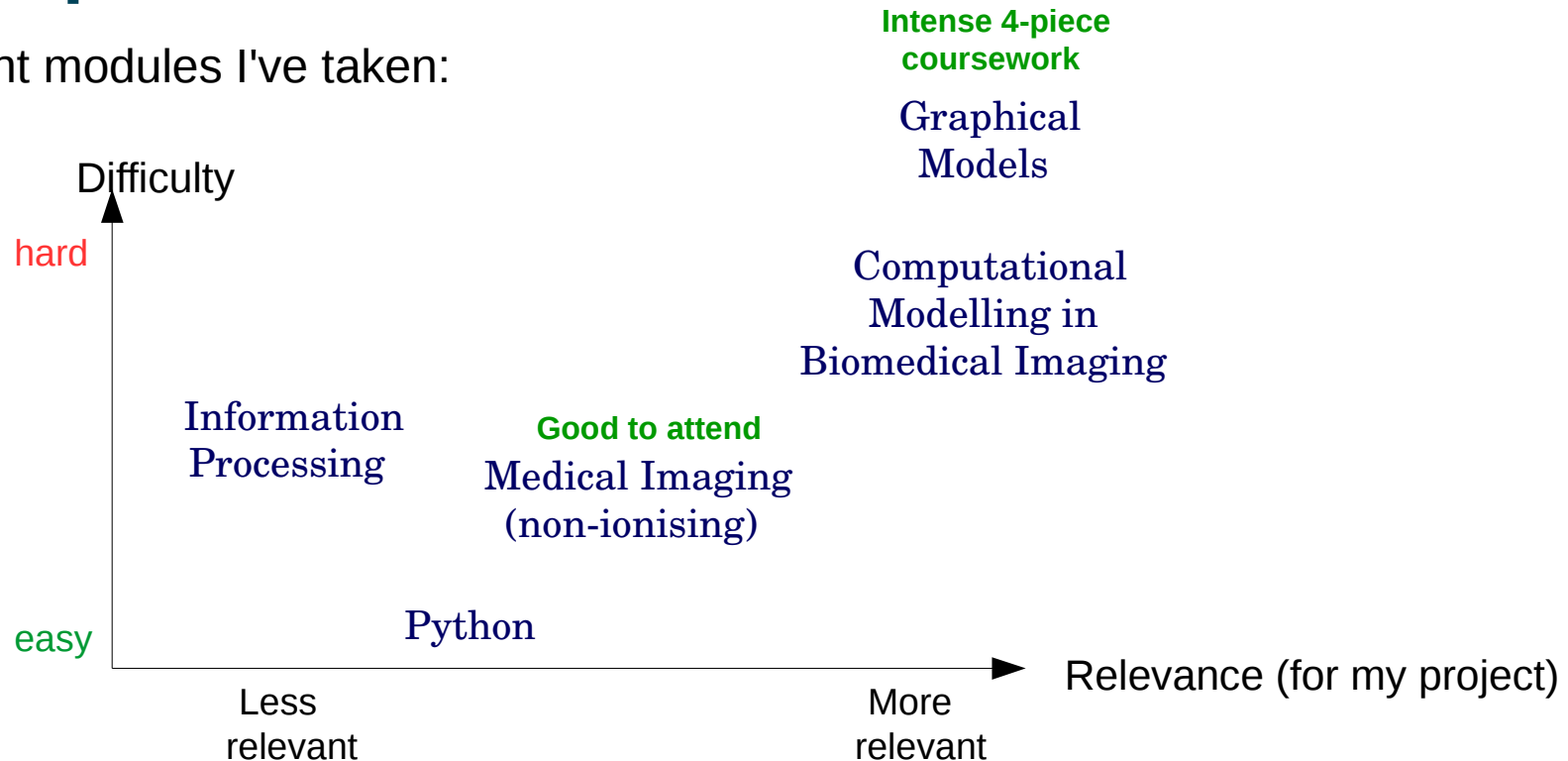


generate atrophy snapshots



CDT Experience

- Taught modules I've taken:



- Recommendation for future students:

Volunteer for an MRI scan!