Amber’s Script of Part I problem

Hello, and thank you for watching this video. This video presents our team’s solution to a clinical problem, as part of a digital health project.

We are a team of students from QUT with a strong focus on using data and modelling to solve real healthcare challenges.

The project is split into two parts: Part I focuses on brain MRI analysis, and Part II applies similar techniques to image-based feature extraction. Let’s begin with Part I.

In this part, we use a specialized MRI technique called DTI to analyse how water moves through brain tissue

In healthy brains, water follows organised nerve fibres. But when tissue is damaged such as in stroke, tumours, or early-stage neurodegeneration, that pattern breaks down.

This method detects those subtle changes, turning raw scan data into meaningful clinical indicators, helping doctors detect problems earlier and with more confidence.

I’ll now hand over to [Name] to show how our team brought this to life.