A significant use case for MRI is the identification of neurodegenerative diseases and/or tumours within the brain. MRI scans produce enormous amounts of data which can be extremely difficult to analyse manually. As such, a combination of mathematical and machine learning techniques are often employed in conjunction with one another to aid such analysis. As a group we used a mathematical technique common in this field to create a model that can detect moustaches within images of faces with a high degree of accuracy. This was done as a demonstrative proxy for the use of this technique in the identification of tumours and/or biomarkers of disease within MRI brain scans. In a real implementation, machine learning would most likely be used in conjunction with the mathematical technique, however since we are mainly focusing on the mathematics, our detector did not rely on any machine learning techniques. It should be noted that although our chosen proxy is two dimensional while MRI data is three dimensional, extending the maths to three dimensions is extremely simple.