

Title: A web user interface image processing tool for classifying the extent of dementia across Alzheimer's.

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Abstract:

Alzheimer's disease (AD) is the most common form of dementia. This project used four image specifications to classify the dementia stages in each patient applying the CNN algorithm. Employing the CNN-based in silico model, the authors successfully classified and predicted the different AD stages and got around 97.19% accuracy. Later, a web interface tool was developed to educate doctors or researchers to check the patients' dementia level based on the MRI brain images and suggest symptoms that strengthen the predicted level of AI. A user uploads the brain scan, which is sent to the backend server, where the image is processed and predicted. The information is sent to the user with a web interface showing that level and symptoms common in that specific level. Different front-end and back-end technologies are used to process the image data. We hosted our project on the google collab platform, an instance of a highly configured server that can run machine learning models efficiently.