**Machine Learning and Evolutionary Approach for Alzheimer’s disease detection**

B.Tech Computer Science & Engineering

# Maharaja Agrasen Institute of Technology (GGSIPU)

**Trojan Horse**

**S. P. Pradhyumna – 08414802716**

**Shubham Goyal – 10314802716**

**Karan Singh - 41014802716**

# ABSTRACT

**Alzheimer's disease** is a chronic neurodegenerative disease that usually starts slowly and gradually worsens over time. It is the cause of 60–70% of cases of dementia. The most common early symptom is difficulty in remembering recent events. As the disease advances, symptoms can include problems with language, disorientation (including easily getting lost), mood swings and loss of motivation, not managing self-care, and behavioural issues. As a person's condition declines, they often withdraw from family and society. Gradually, bodily functions are lost, ultimately leading to death. Although the speed of progression can vary, the typical life expectancy following diagnosis is three to nine years.

Idea would be to use evolutionary approach to extract the main useful information from the Alzheimer dataset and use it in machine learning algorithms to increase the accuracy of the result i.e. declaring whether the patient is suffering from Alzheimer’s or not.

The technology stack used here will be python. Machine learning and Evolutionary algorithms will also be used.

**Keywords:**

Alzheimer’s disease

Evolutionary Algorithms

Machine learning

Python