**Brain Hemorrhage Detection**

**Abstract:**  
Brain hemorrhage is a critical condition that demands prompt detection and treatment to enhance patient outcomes. Traditional detection methods depend heavily on radiologists' expertise to analyze CT scans and MRIs, which can be time-consuming and susceptible to human error. To mitigate these challenges, this research investigates deep learning and machine learning approaches for automating brain hemorrhage detection in medical images.

The study focuses on developing models capable of accurately identifying hemorrhages with high sensitivity and specificity. It includes image preprocessing and the application of advanced models for detection and classification. Performance evaluation is conducted using a dataset of brain hemorrhage images, assessing the models’ accuracy while minimizing false positives and negatives.

The primary objective is to develop an automated diagnostic tool that aids healthcare professionals in making timely and precise decisions regarding brain hemorrhages. Additionally, the research explores the models' computational efficiency, emphasizing their applicability in resource-constrained environments such as mobile devices and clinical settings with limited resources. Ultimately, this work aims to create accessible and scalable diagnostic solutions to improve brain hemorrhage management in various healthcare contexts.

**GROUP MEMBERS :  
M. Sri Manish Reddy 21911A05G7  
B. Nilesh 21911A05D7  
B. Rakesh Kumar 21911A05D9  
B. Srikanth 21911A05E2**

**Project Guide: Project Coordinator:  
Ms. A. Lalitha Ms. G. Surekha**