

(51) International classification :A61B0005000000, G06N0020000000, A61B0005369000, G16H0050200000, G06K0009620000

(86) International Application No :NA  
 Filing Date :NA

(87) International Publication No :NA  
 (61) Patent of Addition to Application Number :NA  
 Filing Date :NA

(62) Divisional to Application Number :NA  
 Filing Date :NA

(71)Name of Applicant :  
**1)Malla Reddy Engineering College**  
 Address of Applicant :Malla Reddy Engineering College Dhulapally post via Kompally Maisammaguda Secunderabad -500100 Secunderabad -----  
**2)Dr J Anitha**  
**3)Mr.P. Srikanth**  
**4)D Syam Kumar**  
**5)Ms shaik.jasmine**  
**6)Ms Veeranalla Siva Pavani**  
**7)Mr. Syed Abdul Haq**  
**8)Mr. K. Mani Raju**  
**9)Ms. T.Jagadeeswari**  
**10)Mr. Malladi Chanti**  
**11)Mr. Shaik Rabbani**  
 Name of Applicant : NA  
 Address of Applicant : NA

(72)Name of Inventor :  
**1)Malla Reddy Engineering College**  
 Address of Applicant :Malla Reddy Engineering College Dhulapally post via Kompally Maisammaguda Secunderabad -500100 Secunderabad -----  
**2)Dr J Anitha**  
 Address of Applicant :Professor Computer Science Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Medchal-Malkajiri-500100. State: Telangana Email ID & Contact Number: anithanv28@gmail.com & 9298303067 Secunderabad -----  
**3)Mr.P. Srikanth**  
 Address of Applicant :Assistant Professor Computer Science Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajiri-500100. State:Telangana Email ID & Contact Number: srikanth.10073@gmail.com 7396461380 Secunderabad -----  
**4)D Syam Kumar**  
 Address of Applicant :Assistant Professor Computer Science Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Medchal-Malkajiri-500100. State:Telangana Email ID & Contact Number: syam.kumar1258@gmail.com&9701920207 secunderabad -----  
**5)Ms shaik.jasmine**  
 Address of Applicant :Assistant Professor Computer Science Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Medchal-Malkajiri-500100. State: Telangana Email ID & Contact Number:sjasmine120@gmail.com& 7799585654 Secunderabad -----  
**6)Ms Veeranalla Siva Pavani**  
 Address of Applicant :Assitant Professor Computer Science Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Medchal-Malkajiri-500100. State: Telangana Email ID & Contact Number:pavaniveeranala3@gmail.com& 9640908978 Secunderabad -----  
**7)Mr. Syed Abdul Haq**  
 Address of Applicant :Assistant Professor Computer Science Engineering-Data Science Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajiri-500100. State:Telangana Email ID & Contact Number: abdulhaq007@gmail.com & 9989354907 Secunderabad -----  
**8)Mr. K. Mani Raju**  
 Address of Applicant :Assistant Professor Computer science Engineering Dept., Malla Reddy Engineering College, Maisammag0uda (Post. Via. Kompally), Mechal-Malkajiri-500100. State:Telangana Email ID & Contact Number: maniraju.komma@gmail.com & 9849484697 Secunderabad -----  
**9)Ms. T.Jagadeeswari**  
 Address of Applicant :Assistant Professor Computer Science Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Medchal-Malkajiri-500100. State: Telangana Email ID & Contact Number: jagadeeswari2003@gmail.com & 7842354470 Secunderabad -----  
**10)Mr. Malladi Chanti**  
 Address of Applicant :Assistant Professor Computer Science Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajiri-500100. State:Telangana Email ID & Contact Number: chantimalladi67@gmail.com & 9985803458 Secunderabad -----  
**11)Mr. Shaik Rabbani**  
 Address of Applicant :Assistant Professor Computer Science Engineering Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajiri-500100. State:Telangana Email ID & Contact Number: shaikrabbani426@gmail.com & 9160487336 secunderabad -----

(57) Abstract :  
 ABSTRACT Detecting epileptic seizures using EEG has evolved significantly with the integration of Machine Learning (ML) techniques. Early detection is crucial for prompt treatment and risk reduction. Recent advancements in AI and ML have facilitated innovative approaches to seizure detection, focusing on feature methods and classification algorithms. Researchers aim to enhance clinical practice by predicting seizures in advance, alleviating their adverse effects. Machine learning classifiers effectively analyze EEG data, identifying patterns while maintaining performance. This study aims to develop a hybrid model for seizure detection using ML algorithms, optimizing classification accuracy with specific techniques. Validation of the system's performance, both with full and reduced feature sets, highlights the impact of feature extraction on classifier accuracy and execution time. This machine-learning-based decision support system aids in epilepsy diagnosis, processed using Python with Decision Tree and Naïve Bayes algorithms, determining the most accurate algorithm for seizure detection.

No. of Pages : 10 No. of Claims : 4