# BRAIN DECODING USING EEG

SODUM MANI VARDHAN REDDY

. ta Scientist: Handle data

acquisition and preprocesing.

. Machine Learning Engineer.

Develop and evaluate

neural hetworks.

. BCI Specialist: Integra te

models into BCI systemens

Signal Processing

* Feature Extraction
* Apply Independent Compount

Analysis (ICA) to filter EEG signals and extract fetures.

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## Data Acquisition:

* Collect EEG Data
* Preprocess EEG data to remove artifacts

artifacts.

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Real-Time Application

* Integration with BCI
* Connect EEG decoder with Brain Computer Interface

Model Evaluation

* Validate model performance using test data

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Model Development

* Neural Network Design
* Develop Convolutional Neural
* Network for decoding

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