



# ASTRONOMICAL CLASSIFICATION USING AI

Siddharth Chaini (17275) & Soumya S Kumar (17280)

Unraveling the secrets of the night sky

In this project, we use the PLAsTiCC dataset provided by the LSST team as part of the PLAsTiCC Kaggle competition to implement a GRU based ensemble model for classification of astronomical sources. With minimum preprocessing and without augmentation, our stacked ensemble of GRU and Dense networks achieves an accuracy of 76.243%. Data from astronomical surveys such as LSST will help researchers answer questions pertaining to dark matter, dark energy and the origins of the universe; accurate classification of astronomical sources is the first step towards achieving this. Our code is open-source and has been made available on GitHub:

<https://github.com/AKnightWing/Astronomical-Classification-PLASTICC>