Machine Learning Intern 2023

Please provide the solution for the task described below as a Python script (not a notebook). The solution must be submitted as a link to GitHub, Bitbucket, GitLab, or any other preferred version control system. Don't do any feature engineering other than necessary transformations for your models.

1. Load the Covertype Data Set
    - https://archive.ics.uci.edu/ml/datasets/Covertype
2. Implement a very simple heuristic that will classify the data
    - It doesn't need to be accurate
3. Use Scikit-learn library to train two simple Machine Learning models
    - Choose models that will be useful as a baseline
4. Use TensorFlow library to train a neural network that will classify the data
    - Create a function that will find a good set of hyperparameters for the NN
    - Plot training curves for the best hyperparameters
5. Evaluate your neural network and other models
    - Choose appropriate plots and/or metrics to compare them
6. Create a very simple REST API that will serve your models
    - Allow users to choose a model
      (heuristic, two other baseline models, or neural network)
    - Take all necessary input features and return a prediction
    - Do not host it anywhere, the code is enough
7. (Optional) Create a Docker container image to serve the API

Your solution should be clean, readable, modular, easy to run, and documented. Try to be concise, do not add any extra functionalities.