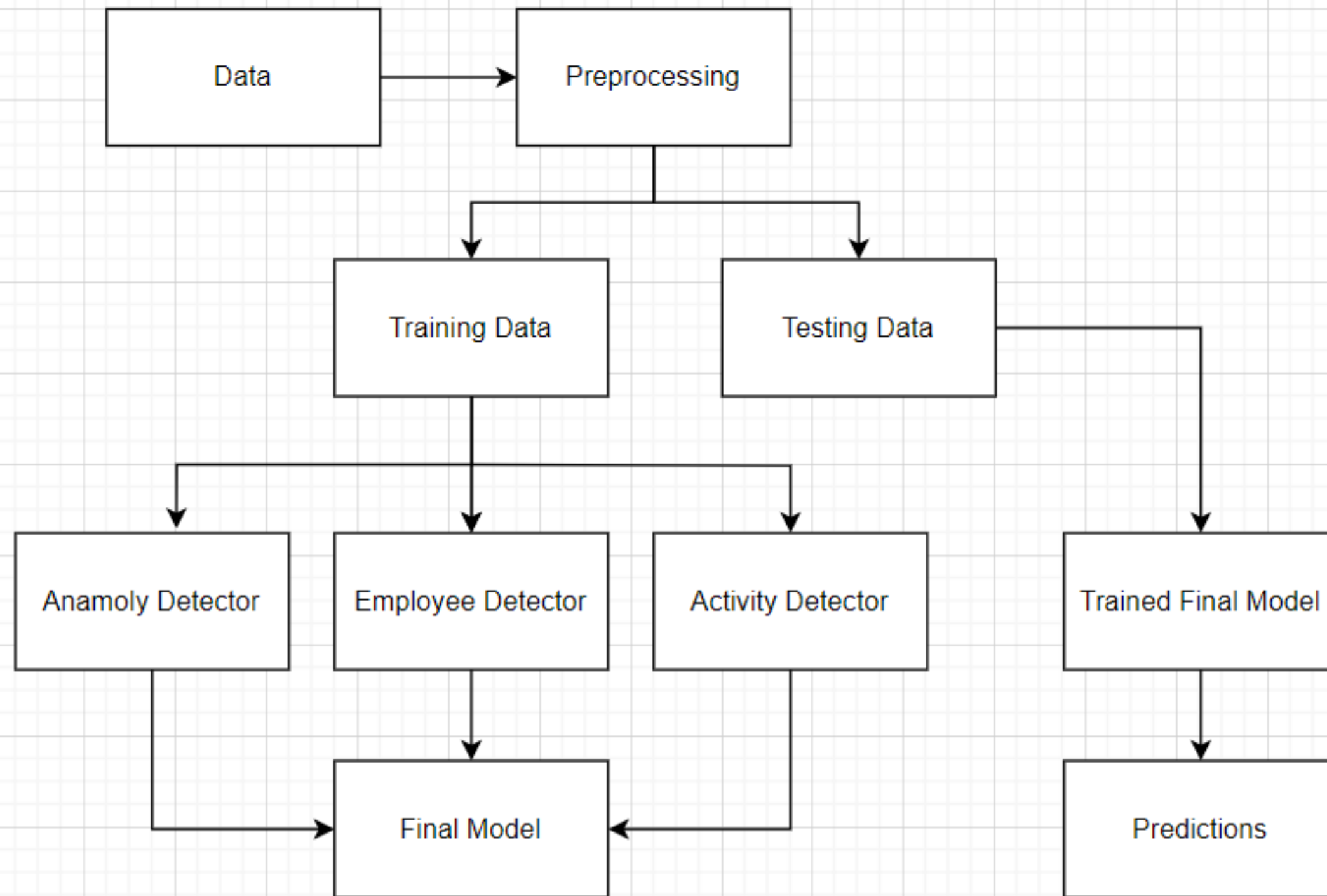# Problem Statement #2 Building a new Employee Security System
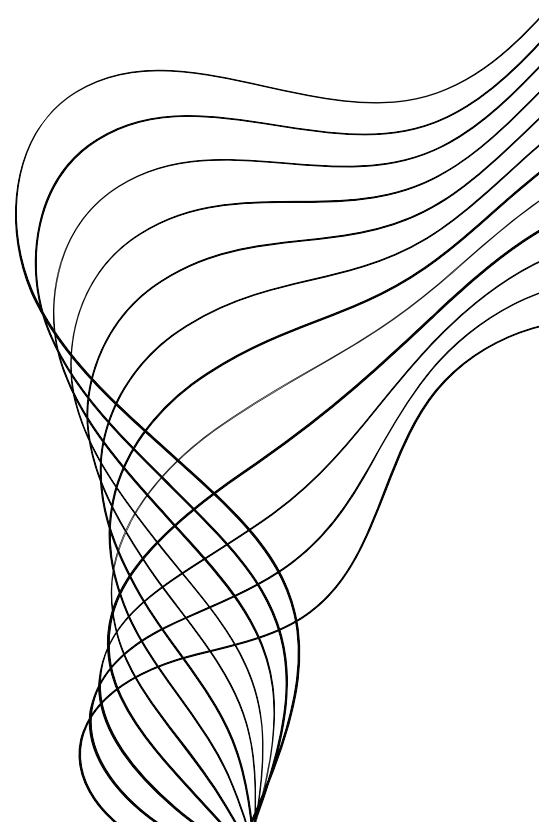
Tech Stack Used

- **Library Used: Tensorflow**
- **Language: Python**
- **Platform: Kaggle**

Approach

Division of tasks

- **Anomaly Detection**
- **If it is not an anamoly then the data is from which employee and what activity he is doing now**

Anomaly Detection

- **Tried two different models**
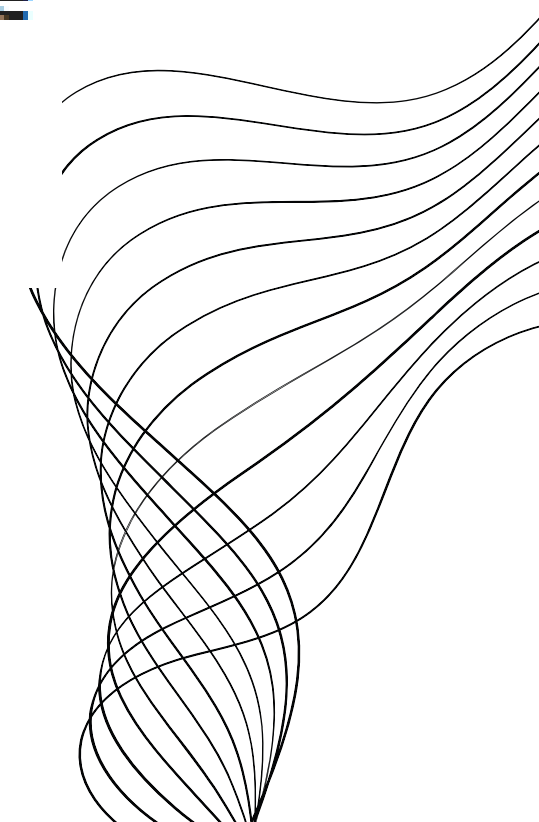- **Isolation Forest**
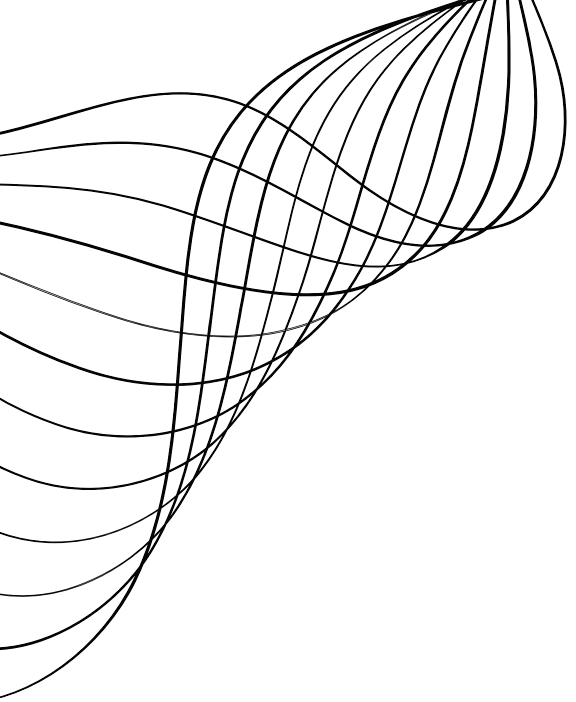- **Autoencoders**

Employee & Activity Detection

- Deep Neural Network Architechture

Screenshots of Predictions from Final Model

```
Employee with employee id 29  is doing WALKING activity
Employee with employee id 6  is doing LAYING activity
Employee with employee id 10  is doing LAYING activity
Employee with employee id 9  is doing LAYING activity
This actions does not seem to be of your company employee
Employee with employee id 27  is doing WALKING activity
Employee with employee id 0  is doing WALKING activity
```

Thank you