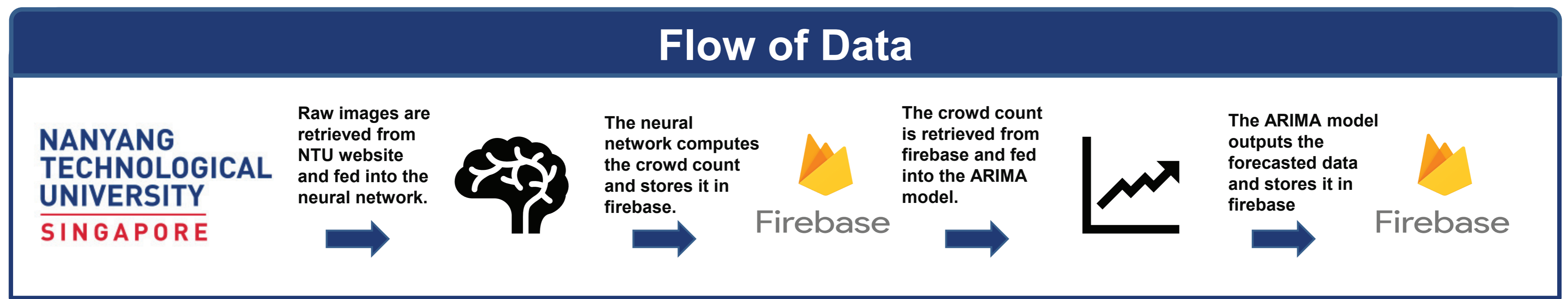# Smart Object Counter

Track real-time crowd count with future predictions of crowd levels
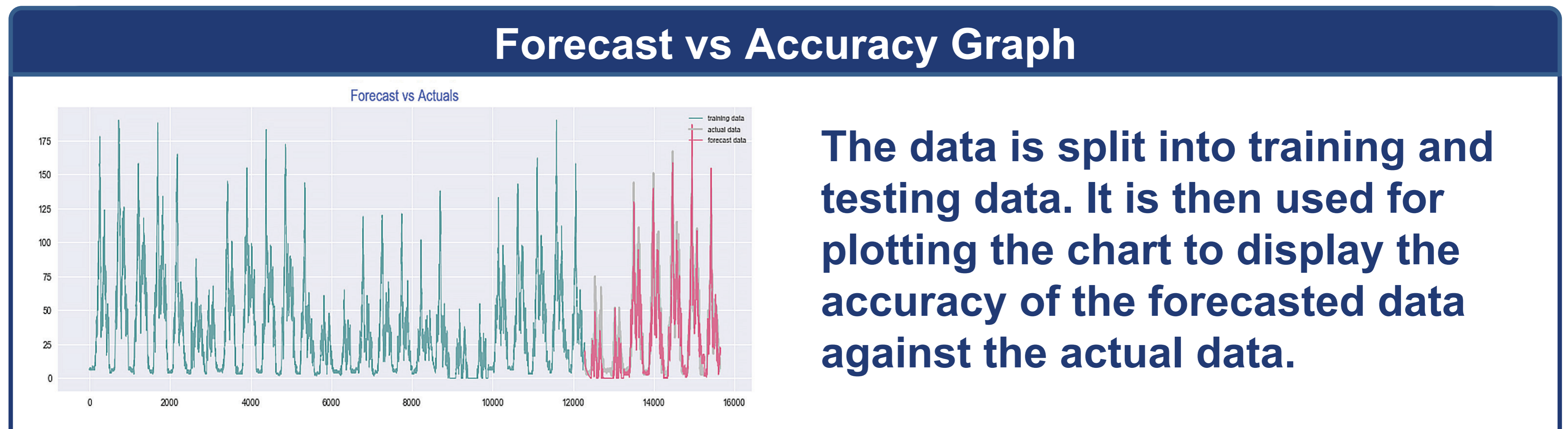
Project Objectives:

1. Create a web application that allows an everyday user to be able to get an estimate of the number of people in specific areas of Nanyang Technological University.

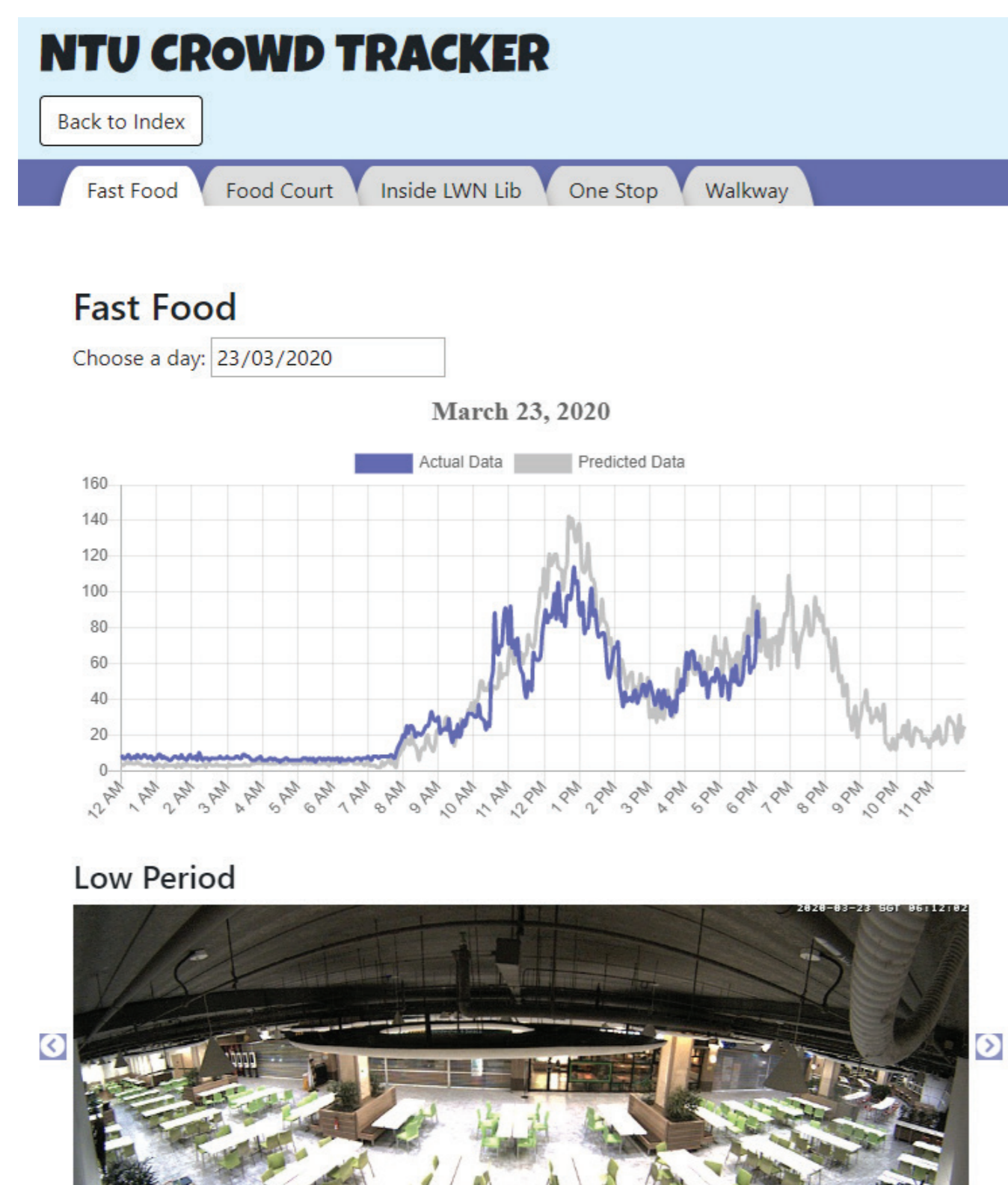2. Make predictions on the crowd level in the near future.

Flow of Data

NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE

Raw images are retrieved from NTU website and fed into the neural network.

The neural network computes the crowd count and stores it in firebase.

Firebase

The crowd count is retrieved from firebase and fed into the ARIMA model.

The ARIMA model outputs the forecasted data and stores it in firebase

Firebase

Forecast vs Accuracy Graph

Forecast vs Actuals

The data is split into training and testing data. It is then used for plotting the chart to display the accuracy of the forecasted data against the actual data.

NTU CROWD TRACKER

Back to Index

Fast Food | Food Court | Inside LWN Lib | One Stop | Walkway

Fast Food

Choose a day: 23/03/2020

March 23, 2020

Actual Data | Predicted Data

Low Period

Functions:

Actual and forecasted data saved in firebase retrieved and displayed as a chart.

- ✓ Select from a range of locations
- ✓ Date selection option
- ✓ Displays peak and low period images for visual comparison

Student: Ting Jie Yi Rachel | **Supervisor:** Dr Loke Yuan Ren