

1

Set the Goals

Define the output you want to create in a couple of sentences

Build a predictive model using Python to forecast hourly traffic volumes at road junctions using historical data. Apply data analysis and modeling techniques to deliver accurate and actionable insights.

Add the skills that you want to learn by the end of the menternship

1. Python

2. Data Visualisation

3. Data Analysis

4. Modeling techniques

Add the key learnings you want

1. Learn how to create graphs, charts are easily understandable.

2. Learn how to Analyse huge datasets with different techniques.

3. Create a presentation which is visually attractive.

2

Major Constraints

Add the constraints you face in working on the tasks mentioned in the menternship (for example: data cleaning, creating a content calendar)

1. Analyzing and presenting traffic data in an understandable manner.

2. Selecting a model that balances accuracy with real-time prediction efficiency for hourly traffic forecasts.

3. Challenges in managing incomplete data and irregular time series entries.

Find resources on your own that can help you and add below

1. [Working with missing data](#)

2. [How to make a professional presentation?](#)

3. [Introduction to Matplotlib](#)

4. [Time Series Forecasting](#)

5. [Traffic Prediction Using Machine Learning](#)

6. [Accuracy Metrics in ML](#)

3

Add the Schedule

Add the Schedule Below

Stage	Add the deadline by when you want to complete the corresponding steps	Tick when completed
Start of the Menternship	May 12, 2025	<input type="checkbox"/>
Complete the Workplan and Submitted	May 18, 2025	<input type="checkbox"/>
Component 2	May 21, 2025	<input type="checkbox"/>
Component 3	May 24, 2025	<input type="checkbox"/>
Component 4	May 26, 2025	<input type="checkbox"/>
Component 5	May 28, 2025	<input type="checkbox"/>
Completed the Menternship	May 31, 2025	<input type="checkbox"/>
Recieved the Feedback over email	June 5, 2025	<input type="checkbox"/>
Submitted the Final Draft	June 22, 2025	<input type="checkbox"/>

Add the Schedule for Mentor Sessions you want to attend

Stage	Date (Add dates in blank spaces)	Tick when completed
Mentor Session 1	May 18, 2025	<input type="checkbox"/>
One on One Call (Book one when you have specific queries)		<input type="checkbox"/>
Mentor Session 2	May 25, 2025	<input type="checkbox"/>
Mentor Session 3	June 8, 2025	<input type="checkbox"/>
One on One Call (Book one when you have specific queries)		<input type="checkbox"/>
Mentor Session 4		<input type="checkbox"/>

Do not Alter

You need to fill