**Project Development Phase**

**Model Performance Test**

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| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID30092 |
| Project Name | TrafficTelligence: Advanced Traffic Volume Estimation with Machine Learning |
| Maximum Marks |  |

**Model Performance Testing:**

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| **S.No.** | **Parameter** | **Values** |
| 1 | **Model Summary** | - Input Layer: 11 features- Dense hidden layers with ReLU- Output layer for regression |
| 2 | **Accuracy** | - **Training Accuracy**: ~95% (R² score)- **Validation Accuracy**: ~93% (R² score) |
| 3 | **Fine-Tuning Result** | - **Validation Accuracy After Tuning**: Improved to ~94% by adjusting hyperparameters |