

# Experiment Tracking Table

| Experiment ID | Model Type        | Hyperparameters        | Preprocessing Steps | Feature Selection Method | Train/Test Split | MSE          | R <sup>2</sup> Score |
|---------------|-------------------|------------------------|---------------------|--------------------------|------------------|--------------|----------------------|
| EXP-01        | Linear Regression | Default                | None                | All                      | 80/20            | 0.54<br>6696 | 0.259<br>767         |
| EXP-02        | Linear Regression | Regularization enabled | Standardization     | correlation-based        | 80/20            | 0.60<br>7671 | 0.177<br>207         |
| EXP-03        | Random Forest     | 50 trees, depth 10     | None                | All                      | 80/20            | 0.42<br>9550 | 0.418<br>384         |
| EXP-04        | Random Forest     | 100 trees depth 15     | None                | selected features        | 80/20            | 0.40<br>6039 | 0.450<br>218         |