

RideMate: AI-Driven Optimal Routing, Cost Estimation, and Crash Detection for Long-Distance Bike Riding

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Abstract: *RideMate is an intelligent system aimed at enhancing long-distance motorcycle travel by focusing on efficient routing, accurate cost estimation, and real-time crash detection. Leveraging machine learning and smartphone sensor data through a React Native application, it delivers customized navigation, anticipates trip expenses based on diverse variables, and promptly identifies accidents, notifying emergency contacts automatically. This integrated solution elevates rider safety, convenience, and the overall travel experience.*

Keywords: Machine Learning, React Native, Optimal Routing, Cost Estimation, Crash Detection, LongDistance Riding

