The Guardian

Artificial Intelligence System for Roadside Assistance and Vehicle Maintenance

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DECLARATION

I declare that is thesis is my own work and has not been submitted in any form for another degree or diploma at any university or other institution of tertiary education. Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given.

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ABSTRACT

Artificial intelligence for roadside assistance and vehicle maintenance system develops for users with less mechanical knowledge. The main scope of this system is to provide technical or non-technical information without delay when requested by system users. The system enables users to connect to the system using the shorts message system (SMS) feature. The system consists of 4 subsystems: the short message gateway, NLP (Natural Language Processing), Chat-bot and Database Handler. When a user sends a question to the system, it sends directly to the natural language processing module to understand what the user is requesting. If the NLP is unable to handle the problem, the system sends those requests to the Chat-bot, which can communicate with the users to handle ambiguous issues and provide solutions to the users' problems. Existing systems for road assistance are more difficult in practice. They are more expensive to use, which means it costs more for the user to continue the service after the warranty period and they provide the service only to registered customers. Although service agents are almost always busy and need a high cell but a phone or other device to use those services. Hence, the shortcomings of existing systems lead to the development of an artificial intelligence system for roadside assistance. Furthermore, this research will help people doing research in the field of roadside assistance and also people who interest to perform their maintenance without the assistance of a third party.

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