

# **Design of software to support inspection, diagnosis, and repair of the Toyota Land Cruiser GRJ200, UZJ200, VDJ200 body electrical system.**

**Tran Anh Dung**

**Abstract:** In the increasingly complex context of automotive operation and maintenance, selecting a topic for designing software to support inspection, diagnosis, and repair of the Toyota Land Cruiser body electrical system (models GRJ200, UZJ200, VDJ200) is necessary to enhance maintenance efficiency. The objective of this study is to build a technical support system capable of data analysis, diagnosis, and repair guidance for electronic faults in the body of the aforementioned vehicle. The implementation method includes studying the theory of electrical system structure, combined with deploying a software application based on a graphical user interface (GUI) to provide necessary information for technicians. The expected outcome of the project is to create a useful tool that can improve the quality of maintenance services as well as the time and cost of vehicle repairs.

**Keywords:** Support software, Electronic diagnostics, Automotive maintenance, Toyota Land Cruiser, GUI