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In Collaboration with

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Avionics Sensor Data Recognition System

A Thesis by

Mr. Janith Seneviratne

Supervised by

Ms. Rashmi Perera

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Abstract

This research paper addresses a problem related to aviation industry. Electrical system of an airplane known as avionics sensor system in technical term is considered while solving the related problem. Incorrect responses of the avionics system and activating false alarms in safety features is the identified problem.

Solution for the mentioned problem is to creating a system that is capable of overcoming the existing problems, a system capable of output the avionics systems information on specific flight operations. Properly fine-tuned Web application is implemented according to the information gathered. Questionnaire is used for the requirements gathering for this web application. Technical terms are used in this project which are related to the aviation industry. Web application also used for technical terms. User guideline is provided in the web application to enter in the web application. A Machine learning part is implemented coupled with a featured data set of the avionics sensor operations. The ultimate goal of the use of machine learning technology in this project is to make possible predictions that will appear in the future events of avionics sensor systems maintenance process.

This type of web application is not in use currently in the aviation industry. Machine learning technology is very rarely used in the aviation industry since these technologies are still in testing phases. In this research project machine learning is used in order to come up with better solutions for the real world problem in avionics sensor systems. Providing this information and a working web application is a novel approach for the aviation domain.