FUEL LEVEL MONITORING AND SECURITY WARNING TOOLS USING IOT FOR KOMATSU EXCAVATOR PC200-8M0

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STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

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ABSTRACT

FUEL LEVEL MONITORING AND ANTI FUEL THIEF WARNING TOOLS USING IOT FOR KOMATSU EXCAVATOR PC200-8M0

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KOMATSU Excavator PC 200-8M0 which operates in the mining and logging area is located in a remote area from the main office. This makes the need for information on the amount of fuel in each excavator in real time to facilitate the regulation of refueling and also to provide warnings and also prevent fuel theft.

This research was conducted to make an Internet of Things based remote monitoring tool using NodeMcu to monitor the amount of fuel from each excavator unit in real time. Data is uploaded to the webserver and accessed directly on computers and mobile phones.

Unreasonably reduced fuel from the fuel tank will be a reference to activate the alarm and also the notification of theft using Tweeter. On the ground, fuel technicians often take fuel for service purposes, to distinguish theft or not, fuel volume extraction data is determined from some actual field activities.

Keywords: NodeMcu, Internet Of Things, real time monitoring, excavator, anti thief system,PC200-8M0.

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DEDICATION

This study is wholeheartedly dedicated to my beloved wife and children, who have been our source of inspiration and gave me strength when I thought of giving up.

To UT School – PT United Tractors Tbk. who has provided funding and support during the study period

And lastly I dedicated to the Almighty God, thank you for the guidance, strength, power of mind, protection and skills and for giving us a healthy life. All of

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I have found my coursework throughout the Curriculum and Instruction program to be stimulating and thoughtful, providing me with the tools with which to explore both past and present ideas and issues.

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TABLE OF CONTENTS

STATEMENT BY THE AUTHOR 2

ABSTRACT 3

DEDICATION 5

ACKNOWLEDGEMENTS 6

TABLE OF CONTENTS 7

LIST OF FIGURES 10

LIST OF TABLE 11

CHAPTER 1 – INTRODUCTION 12

1.1 Background 12

1.2 Objectives 13

1.3 Research Question 13

1.4 Hypothesis 13

CHAPTER 2 - LITERATURE REVIEW 14

2.1 KOMATSU Hydraulic Excavator 14

2.2 Product Knowledge Komatsu PC200-8M0 17

2.3 Power Train of KOMATSU PC200-8M0 18

2.4 Engine of KOMATSU PC200-8M0 19

2.5 Fuel System of KOMATSU PC200-8M0 20

2.5.1 Two Way Valve (TWV) / Nozzle 20

2.5.2 Pressure Control Valve (PCV) 20

2.6 Fuel Tank 22

2.7 Various Fuel Level sensor 23

2.7.1 Ultrasonic Level Sensors 23

2.7.2 Capacitance Level Sensors 23

SWISS GERMAN UNIVERSITY

2.7.3 Optical Level Sensors 24
2.7.4 Radar Level Sensor 25
2.7.5 Float Sensor 25
2.8 Fuel Level sensor on KOMATSU PC200-8M0 27
2.9 Internet of Things 29
2.10 IOT Web Server 31
2.11 NodeMCU V3. 33
2.12 Previous Study 34
CHAPTER 3 – RESEARCH METHODS 36
3.1 Research Framework. 36
3.2 Scope of Study 37
3.3 Equipement and Material 37
3.3.1. Equipement 37
3.3.2. Material 38
3.4 Software 40
3.4.1. Thingspeak Webserver 40
3.4.2. Data Streamer 40
3.4.3. IDE Arduino 41
3.4.4. MIT App Inventor 42
3.5 Hardware & Software Design 42
3.6 Sensor Measurement and Calibration 47
CHAPTER 4 – RESULTS AND DISCUSSIONS 52
4.1 Initial evaluation 52
4.2 Data Analysis 54
4.2.1 Data analysis when quick simulation. 55
4.2.2 Data analysis when simulate the normal level by slowly reducing the fluid in the tank. 63
4.2.3 Warning message to Twitter account 66
4.3 Costs 67
CHAPTER 5 – CONCLUSIONS AND RECCOMENDATIONS 68

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5.1 Conclusions 68

5.2 Recommendations 68

REFERENCES 70

CURRICULUM VITAE 72

ATTACHMENT 73

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LIST OF FIGURES

Page

FIGURE 1 KOMATSU PC200-8M0 12
FIGURE 2 EXCAVATOR USAGE APPLICATION 14
FIGURE 3. BACKHOE & SHOVEL KOMATSU EXCAVATOR 15
FIGURE 4 PART OF THE EXCAVATOR 16
FIGURE 5 EXCAVATOR IN MINING AND FORESTRY AREA 16
FIGURE 6. KOMATSU PC200-8M0 (KOMATSU LEAFLET 2018) 17
FIGURE 7. KOMATSU PC200-8M0 POMER TRAIN (KOMATSU SHOP MANUAL) 18
FIGURE 8. SAA6D107E-1 ENGINE 19
FIGURE 9. FUEL SYSTEM LINE (KOMATSU TRAINING AID) 21
FIGURE 10. COMMON RAIL FUEL SYSTEM (KOMATSU TRAINING AID) 21
FIGURE 11. FUEL TANK COMPONENT (KOMATSU PART BOOK) 22
FIGURE 12. ULTRASONIC LEVEL SENSOR 23
FIGURE 13. CAPACITANCE LEVEL SENSOR 24
FIGURE 14. OPTICAL IR LEVEL SENSOR 24
FIGURE 15. RADAR LEVEL SENSOR 25
FIGURE 16. RESISTIVE FLOAT LEVEL SENSOR 26
FIGURE 17. POSITION OF FUEL LEVEL SENSOR (KOMATSU SHOP MANUAL) 27
FIGURE 18. FUEL LEVEL SENSOR DRAWING (KOMATSU SHOP MANUAL) 29
FIGURE 19. SHORT WIRING DIAGRAM OF FUEL LEVEL SENSOR 29
FIGURE 20. IOT MILESTONES (© NISHITH PATHAK AND ANURAG BHANDARI 2018) 30
FIGURE 21. IOT FRAMEWORK 30
FIGURE 22. THINGSPEAK, ONE OF IOT WEB SERVER 32
FIGURE 23. NODEMCU V3 ILUSTRATED AND PIN CONFIGURATION 33
FIGURE 24. *RESEARCH STRATEGY* 36
FIGURE 25. WWW.THINGSPEAK.COM 40
FIGURE 26. DATA STREAMER 40
FIGURE 27. IDE ARDUINO 41
FIGURE 28. MIT INVENTOR 42
FIGURE 29. IOT DESIGN 43
FIGURE 30 *HARDWARE SCHEME* 44
FIGURE 31. ELECTRICAL WIRING DIAGRAM 44
FIGURE 32. PROGRAMING FLOW CHART 45
FIGURE 33 TEST BENCH FACILITY TO MEASURE AND CONTROL FUEL LEVEL 46
FIGURE 34. FLOW SENSOR INSTALLATION POSITION 47
FIGURE 35. FLOW SENSOR CAPACITY 48
FIGURE 36. LEVEL SENSOR MEASURE 49
FIGURE 37. FUEL LEVEL SENSOR OF EXCAVATOR VOLTAGE 50
FIGURE 38. RESPONSE OF MA100 51
FIGURE 39. READ DATA & UPLOAD PROCESS 55
FIGURE 40. QUICK SIMULATION THINGSPEAK UPLOADED DATA 56
FIGURE 41. FUEL LEVEL REAL TIME DATA 57
FIGURE 42. SERIAL DATA SWOW MOVING AVERAGE RESPONSE 58
FIGURE 43. MOVING AVERAGE OUTPUT DATA 58
FIGURE 44. SERIAL DATA SHOWING THEFT DETERMINATION AND UPLOAD 59
FIGURE 45. THINGSPEAK CHART FOR THEFT DIRECLY FROM FUEL TANK 59
FIGURE 46. SERIAL DATA WHEN FUEL FLOW FROM SEWAGE DRAIN LINE. 60
FIGURE 47. THINKSPEAK DATA LOG 64
FIGURE 48. THINGSPEAK DATA LOG AFTER CHANGE THEFT DETERMINATION 4% IN 10 SECOND 65
FIGURE 49. TWITTER WARNING MESSAGE 66

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LIST OF TABLE

Page

TABLE 1 DIESEL ENGIN SPECIFICATION (KOMATSU SHOP MANUAL, 2012) 19
TABLE 2. READ CAPACITY OF FUEL TANK (KOMATSU SHOP MANUAL) 28
TABLE 3. RESISTANCE OF FUEL LEVEL SENSOR 28
TABLE 4. TOOLS TABLE 38
TABLE 5. MATERIAL TABLE 39
TABLE 6. FLOW SENSOR MEASURE DATA 48
TABLE 7. DATA RECORD FROM EXCAVATOR LEVEL SENSOR 50
TABLE 8. SUPPORT DATA 53
TABLE 9. QUICK SIMULATION SCENARIO 55
TABLE 10. DIFFERENCE TEST BENCH 63
TABLE 11. CONDITION FOR SIMULATION IN TRUTH CONDITION 63
TABLE 12. COST 67

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