DESIGN AND IMPLEMENTATION OF WIRELESS DIGITAL STETHOSCOPE

By

Sandy Rio Rara Meha 14310065

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SWISS GERMANUMIVERSITY

SWISS GERMAN UNIVERSITY

EduTown BSD City

Tangerang 15339

Indonesia

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Sandy Rio Rara Meha

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. Sandy Rio Rara Meha Student Date Approved by: Ir. Arko M. Sc., Ph. D Thesis Advisor Date Fuad Ughi, MT. Thesis Co-Advisor Date Irvan S. Kartawira. ST. MSc Date

ABSTRACT

DESIGN AND IMPLEMENTATION OF WIRELESS DIGITAL STETHOSCOPE

By

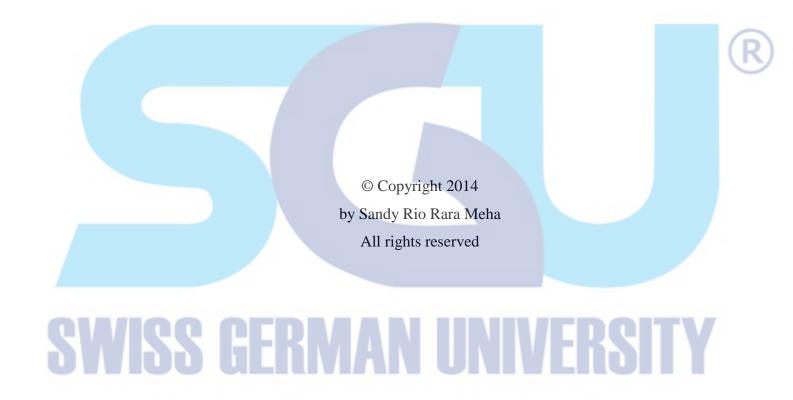
Sandy Rio Rara Meha
Ir. Arko M. Sc.,Ph. D, Advisor
Fuad Ughi, MT., Co-Advisor

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Bumi Serpong Damai

Telemedicine is growing steadily in clinical medicine, especially now when the medical information can be transferred digitally though the internet or other transmission method for medical consultation and medical diseases detection. Since the rural areas in Indonesia have limited number of medical practitioners, telemedicine offers solution for the problem. The device that is being developed to enable telemedicine is wireless digital stethoscope with emphasis on functional development. Measurement results using wireless digital stethoscope are proven to be playable on other compatible devices, can be displayed as a graph, and stored for further analysis by medical experts either locally or from remote location. For real field usage, more extensive development and testing are still required to this initial work to make the system more robust.

Keywords: Telemedicine, Data Transmission, Digital Stethoscope, Patient Monitoring, Audio



DEDICATION

This thesis is dedicated to:

God for his bestowment of knowledge to me

My family for always supporting me during the good and bad times



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