

Universal Hand Analyzer

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July 2017

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Dissertation submitted to the Faculty of Information Technology, University of Moratuwa, Sri Lanka for the partial fulfilment of the requirements of the Honours Degree of Bachelor of Science in Information Technology.

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July 2017

Declaration

I declare that this 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 Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given.

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Confirmation by the Supervisor

The above candidate has carried out research for the M.Sc. in Information Technology Dissertation under my supervision.

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Date:

Name of the Supervisor: Mr.B.H Sudantha

Acknowledgements

This research would not have been possible without the guidance and the help of several individuals who in one way or another helped me and extended their valuable assistance doing the research. First and foremost, I would like to express my sincere gratitude to my supervisor lecturers of University of Moratuwa, for giving me a constant encouragement and support throughout the process.

Also I would like to thank the CTO of Midas Safety, Mr.Arjuna Jayasinghe and Development Manager, Mr. Eranga De Livera for industrial development support and information provided on my research domain. I express a sense of gratitude to colleagues, friends and my beloved parents for their support, strength and help to make this effort a success.

Abstract

The human hand has a considerably large scope of variation in size, shape, and strength between and within individuals and nationalities. Characterizing hands into sizes to accurately account for the variations within a specific population would be a valuable contribution to glove manufacturers.

The research proposal for the “Analysis of wide number of Shapes and Sizes of Hands to Manufacture Gloves” explores an image processing based solution to challenges faced by glove manufacturing companies in creation of various glove sizes that specifically matches different types of hands.

This application would be capable of Scanning Hands, identify the sizes and models, productive analysis, Decision Making and it is integrated with SAP HANA/SAP BI. By feeding the collected data to the analytical engine which comes integrated to SAP HANA, the results are aggregated into comprehensible data outputs.

While 3D scanning technologies are still in early stages of development there is a major demand available. A cutting-edge solution that would comprehensively address the flaws in current systems and integrate the same with enterprise resource planning, would ultimately benefit the manufacturers to gain competitive advantage at the industrial level.

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