**GSM AND WEB – BASED FLOOD MONITORING SYSTEM**

**with SOCIAL MEDIA INTEGRATION AND ANDROID APPLICATION**

**A SPECIAL PROJECT**

Presented to

The Faculty of Electrical/

Electronics and Communications Engineering

MSU-Iligan Institute of Technology

Iligan City

In partial Fulfillment

Of the Requirements for the Degree

**BACHELOR OF SCIENCE IN ELECTRONICS AND**

**COMMUNICATIONS ENGINEERING**

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**ABSTRACT**

Philippines, a country which is visited by an average of 19 typhoons per year, and with most urban areas having poor drainage systems definitely experiences flood catastrophes each year. This project integrates float switches, Arduino microcontroller, GSM Module, cellular phones and the internet through Social Media to create a water level monitoring system that will inform the public, especially those who are living on a flood-prone area on the current water level status of the river nearby their area. The study utilize the use of float switch, which is commonly used to determine liquid level on tanks and other containers, to be used as sensor that will trigger the Arduino microcontroller to command the GSM Module to send Warning messages to assigned cellular phones. There will be several recipients to the Warning message but there is a special recipient which is an android phone, connected to the internet and has the customized android application, which will enable the uploading of the warning message to the Social Media sites and Website simultaneously.

With the increase number of people having access to social media sites, even spending several hours on it for a day. It should be utilized to inform not just the residents along the flood-prone areas, but also the general public regarding the current water level status of Mandulog River or any river or body of water on which this project will be installed.

**Dedicated to**

Our Families…

Our Friends…

Our Mentors…

And most especially to our Almighty God.

**Approval Sheet**

The special project attached hereto, entitled “**GSM AND WEB – BASED FLOOD MONITORING SYSTEM WITH SOCIAL MEDIA INTEGRATION AND ANDROID APPLICATION”**, prepared and submitted by **Jaime C. Pagatpat Jr, Franz Patrick C. Pilapil and Alberto Lucas S. Belgara**, in partial fulfillment for the degree of BACHELOR OF SCIENCE IN ELECTRONICS AND COMMUNICATIONS ENGINEERING, is hereby recommended for approval:

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This special project is approved in partial fulfillment of the requirements for the degree of BACHELOR OF SCIENCE IN ELECTRONICS AND COMMUNICATIONS ENGINEERING.

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Date

**ACKNOWLEDGEMENT**

It would not have been possible to write this undergraduate thesis without the help and support of the kind people around me.

To start, I’m truly grateful to my parents, Mr. and Mrs. Alejandro Luis Belgera, for their support and great patience at all times. Their constant reminders and unequivocal support and advises throughout the years, has given me the inspiration to strive hard in all my endeavours for which my mere expression of thanks likewise does not suffice.

Next of course, to my thesis mates, Jaime and Franz, for the dedication and time to make this paper successful. The hard work and sleepless nights have paid off because we’ve made this far. It has been a privilege to have you both as my thesis mates. And to my ECE batch mates, thank you for you made things more fun and less stressful, you guys made my entire college years more memorable.

To my thesis adviser, Prof. Olga Gerasta, who never failed to extend her views to help me in this paper, her wide knowledge and logical way of thinking have been of great value to me. I am truly grateful to be one of your advisees.

Above all, to the Almighty God, my spiritual adviser, who never left me in all the days of my existence. It is Your never ending love and guidance that made me this far. I am truly blessed to have You. Deeply, with all my heart, thank you.

-Abet

I would like to express my sincerest gratitude to everyone who helped, inspired, motivated and believed in me in completing this thesis study.

First of all, to the strongest woman I have known in my entire life, my ideal woman, my mother, Mrs. Loreta Pagatpat, for all the love, encouragements, care and support you have given to me and my siblings. Thank you for staying strong through the years. To my father, Mr. Jaime Pagatpat Sr, wherever you are, thank you for giving us life and for loving us. Although we shared little memories, but those memories remind me of pure love, kindness and compassion. I always wonder what would it be if you are still around. Thank you also to my siblings, Leah May Pagatpat-Seville, Jeffrey Pagatpat, Uncles Joseph and Vincent Cedrick Cena and the rest of Cena and Pagatpat families for the support and being a great family.

I would like also to thank our thesis adviser, Mrs. Olga Joy Labajo-Gerasta for believing in us and sharing her knowledge and ideas which really helped us in completing this study. I am deeply honored for your trust in us and giving us opportunities to present our study in various conventions and events.

Thank you also to my gangsters in completing this study, Alberto Lucas Belgera, and Franz Patrick Pilapil, for their hardwork, enthusiasm and dedication in completing this study. Indeed our sleepless nights have paid off! Thank you also to Pilapil family, the home that fostered us during overnight sessions in completing this study. To my ECE batch mates, thank you for making my college life memorable, fun and less stressful.

To Department of Science and Technology and To La Salle – John Bosco School Batch 1981 for the support they extended as I pursued this degree.

To my loved one, Yasmin, thank you for always being there and for inspiring and motivating me in all my endeavours. Thank you for your support and for cheering me up during hard times. I am so lucky to have you.

And above all, to Allah SWT, for the unfailing love and guidance. Thank you for giving the strength to face all the challenges that had come on my way. Thank you for answering my prayers and for allowing me to finish this study. Alhamdulillah!

-Jaime

**FRANZ, DIRI IMO. KAW NA LANG BUTANG.**