## **ACKNOWLEDGEMENTS**

First and foremost, I would like to convey my deepest gratitude and appreciation to my supervisor, Dr Teoh Teow Chong for being very supportive and encouraging throughout the completion of this dissertation. The time he has invested to guide me is truly appreciated.

I extend my gratitude to Prof Dr Amir Feisal Merican, the Coordinator of the Masters Bioinformatics Programme for his support throughout the course of the study. Dr. Saharuddin Mohamad, Assoc Prof Dr. Sarinder Kaur, Dr. Arpah binti Abu, Dr. Khang Tsung Fei, and Mr. Teoh Bee Guan for continuous support and encouragement in completing this study and not forgetting all lectures from Department of Bioinformatics who is always ready to help, assist and share their knowledge in this field.

Ms. Thevi and all staffs from Department of Bioinformatics for creating a friendly and healthy working environment.

I would like to dedicate this dissertation to my family members and good friends. Thank you for being the pillar of strength of my life. Even when I gave up on myself, they are always there to lend their hands, pick me up and guide me to the right path.

Finally, a huge thank-you to everyone who has been a part of my life directly or indirectly supported and prayed for me along the way.

Above all the others, my humble gratitude to the Lord for never letting me down, helping and guiding me throughout my life.

December 2014

Priyah Narayanasamy