

ACKNOWLEDGEMENTS.

I am most grateful to my Director of Studies Dr. José Luis Romeral for his continuous help, guidance, support and advice throughout the period of research to which this thesis relates.

I also like to thank Dr. Marcel Jayne for his support and advice especially during my stay in the University of Glamorgan, and also for initiating and maintaining the collaboration between the University of Glamorgan and the "Universitat Politècnica de Catalunya".

I would also like to acknowledge "Departament d'Enginyeria Electrònica" staff for providing enjoyable and educational atmosphere.

Also, I would like to thank the economic support received from the "Comisión Interministerial de Ciencia y Tecnología de España", CICYT, for realising this work, under the TIC98-1092 Project.

Last but not least, I like to thank my parents and my sister for their patience and support. Also, I like to thank Anna for her encouragement and comprehension especially during my stay in the University of Glamorgan.