

# Table of Contents

Introduction .....	1
1.1 Previous Work.....	6
1.1.1 Limitations to the identified problems .....	10
1.2 Thesis Problem Statement .....	12
1.3 Main Contributions.....	13
1.4 Research Methodology .....	15
1.5 The Context of the Thesis.....	16
1.6 Thesis Structure .....	17
1.7 Articles description .....	17
Compendium of Articles.....	21
2.1 Article 1.....	23
2.2 Article 2.....	45
2.3 Article 3.....	94
Discussion.....	116
Conclusions .....	128
References .....	131