List of Tables

1.1	Project Objectives	3
2.1	Zwift Supported Fittness Machine Data (FTMS) Commands	10
2.2	Technical Specifications of the Bluetooth Low Energy (BLE) Standard	12
2.3	Fittness Machine Data (FTMS) Characteristics for Bicycle Training	
	Platforms	13
2.4	Indoor Bike Simulation (SIM) Mode Parameter Data	14
2.5	Best Selling Road and Mountain Bike (MTB) specifications	16
3.1	Derived User Requirements	20
3.2	Functional Engineering Requirements	21
3.3	Performance Engineering Requirements	21
3.4	Concept Boundary Interfaces	23
3.5	Concept Requirement Fulfilment Analysis	24
4.1	Objectives of Hardware Development	25
6.1	RPR-220 Data Sheet Parameter Summary	41
6.2	Stepper Motor Wire Resistance Measurement Results	43
1	Risk Severity Scores	iii
2	Activity Based Risk Assessment of Assembly	iii
3	Activity Based Risk Assessment of Testing	vi