

LIST OF FIGURES

Figure 2.1 Linear Ascending Representation.....	13
Figure 2.2 Triangular Curve.....	14
Figure 2.3 Classifikation of the Patient's Condition Using Fuzzy Tsukatomo.....	16
Figure 2.4 LoRa and LoRa Sx1278 Specifications	17
Figure 3.1 Use and Laying of a Patient Condition Monitoring System.....	22
Figure 3.2 Block Diagram of the Student Inspection Monitoring System.....	23
Figure 3.3 System Design Flow Chart	23
Figure 3.4 System Workflow on the Transmitter Side	25
Figure 3.5 System Workflow on the Reciever Side.....	26
Figure 3.6 Schematics of the Sensor and Transmitter Part System Circuit	27
Figure 3.7 Schematic Circuit of Reciever Parts System	28
Figure 3.8 Body Temperature Parameters	28
Figure 3.9 Heart Rate Parameters	29
Figure 3.10 SPO2 Parameters	30
Figure 3.11 Tsukamoto fuzzy output diagram (Z)	31
Figure 3.12 Tsukamoto fuzzy output diagram (Z)	31
Figure 4.1 Sensor Vital Signs Subject 1.....	39
Figure 4.2 Sensor Vital Signs Subject 2.....	41
Figure 4.3 Monitor Vital sigts.....	41
Figure 4.4 Patient Condition Grouping Diagram.....	41
Figure 4.5 Patient Condition Grouping Diagram.....	42
Figure 4.6 Prototype Measurements and Measuring on the Market.....	43
Figure 4.6 Comparison the Temperatur Sensor with a Thermometergun.....	44
Figure 4.7 Comparison the Heart Rate Sensor with a Oximeter.....	46
Figure 4.8 Comparison Between the SPO2 Sensor With a Oximeter.....	47
Figure 4.10 Delay Comparison Chart	50
Figure 4.11 Troughput Comparison Chart.....	51
Figure 4.12 Packet Loss Comparison Chart.....	53