

## LIST OF FIGURES

Figure II.I Star Topology .....	7
Figure II.II WLAN channels in the 5 GHz band (Lepaja, 2019) .....	9
Figure II.III PPDIOO Cycle .....	18
Figure II.IV Wireshark Logo .....	20
Figure II.V Wireshark Home Interface .....	21
Figure II.VI Ekahau Logo .....	21
Figure II.VII Ekahau AI Pro Home Interface .....	22
Figure II.VIII Telkom University Landmark Tower (TULT).....	23
Figure III.I Conceptual Model .....	26
Figure III.II Research Systematic Swimlane .....	27
Figure IV.I Rujie RG-AP130(W2) V2.....	33
Figure IV.II Ruijie RG-AP720-L.....	35
Figure IV.III Telkom University Landmark Tower Network Logical Topology	38
Figure IV.IV 1st floor Access Point Placement .....	40
Figure IV.V 2nd floor Access Point Placement .....	41
Figure IV.VI 3rd floor Access Point Placement.....	42
Figure IV.VII Signal Strength on 1st Floor .....	43
Figure IV.VIII WIFI testing on Normal Time on TULT 1st Floor.....	44
Figure IV.IX Amount of Packet loss on Normal Time on TULT 1st Floor .....	44
Figure IV.X WIFI testing on High Time on TULT 1st Floor .....	45
Figure IV.XI Amount of Packet loss on High Time on TULT 1st Floor .....	45
Figure IV.XII Signal Strength on the 2nd Floor .....	46
Figure IV.XIII WIFI testing on Normal Time on TULT 2nd Floor .....	47
Figure IV.XIV Amount of Packet loss on Normal Time on TULT 2st Floor ....	47
Figure IV.XV WIFI testing on High Time on TULT 2nd Floor.....	48
Figure IV.XVI Amount of Packet loss on High Time on TULT 2nd Floor .....	48
Figure IV.XVII Signal Strength on the 3rd Floor .....	49
Figure IV.XVIII WIFI testing on Normal Time on TULT 3rd Floor .....	50
Figure IV.XIX Output after implementing packet loss filter .....	50
Figure IV.XX WIFI testing on High Time on TULT 3rd Floor .....	51
Figure IV.XXI Amount of Packet loss on High Time on TULT 3rd Floor .....	51
Figure IV.XXII Research Scenario Swimlane .....	52
Figure IV.XXIII Example of Capture File Properties.....	54
Figure V.I 5 Ghz Signal Strength Mapping on 1st Floor.....	56
Figure V.II 5 Ghz Signal Strength on 2nd Floor.....	60
Figure V.III 5 Ghz Signal Strength Mapping on 2nd Floor.....	64