

List of Figures

1.1	Examples of subgraphs.	4
1.2	(a) The graph K_4 , (b) is the complement of (c) and vice versa.	4
1.3	A graph and its square.	5
1.4	Examples of $K_{4,3}$, P_6 , C_6 and $K_{1,6}$	9
1.5	Some special types of graphs.	9
1.6	An InvG and its IR.	11
1.7	A PerG and its PerD.	12
1.8	A CirG and its CirD.	13
1.9	A TraG and its corresponding TraD.	14
2.1	A tree T	24
2.2	Modified tree T' of the tree T	29
3.1	Interval graph G.	34
3.2	Interval matching diagram of the InvG G of Figure 3.1.	34
3.3	Tree T_{IG} of the InvG G with longest branch on both sides by checking adjacency.	38
3.4	Modified tree T'_{IG} of the tree T_{IG}	43
3.5	An fuzzy interval graph G.	45
3.6	Interval matching diagram of the graph G of Figure 3.5.	45
3.7	Tree T_{IG} of the fuzzy interval graph G.	49
3.8	Modified BFS tree T'_{IG} of the tree T_{IG}	53
4.1	A CirG G.	61
4.2	CirD of the CirG G of Figure 4.1.	61
4.3	BFS trees $T_L(7)$ and $T_R(2)$ rooted at vertices 7 and 2 respectively of the CirG shown in Figure 4.1.	64
4.4	Isomorphic trees $T_{1L}(7)$ and $T_{1R}(2)$ of the BFS trees $T_L(7)$ and $T_R(2)$ respectively, where main path is horizontal.	66

4.5	Modified BFS trees $T'_L(7)$ and $T'_R(2)$ of the trees $T_L(7)$ and $T_R(2)$ respectively shown in Figure 4.3.	68
4.6	A CirG G	73
4.7	CirD of the CirG G of Figure 4.6.	73
4.8	Tree T_{CIR} of the CirG G of Figure 4.6.	75
4.9	Modified tree T'_{CIR} of the tree T_{CIR}	83
5.1	A PerG G.	86
5.2	MchD of the PerG G of Figure 5.1.	86
5.3	BFS tree T rooted at vertex 1 of the PerG G shown in Figure 5.1.	88
5.4	An Illustration.	89
5.5	Region covered by the projection of minimum number of line segments.	89
5.6	Modified BFS tree T' of the tree T shown in Figure 5.3.	91
5.7	A PerG G.	94
5.8	MchD of the PerG G of Figure 5.7.	94
5.9	BFS tree T_{PER} rooted at vertex 1 of the PerG G shown in Figure 5.7.	95
5.10	Modified tree T'_{PER} of the tree T_{PER}	105
6.1	A TraG G	108
6.2	A TraD T of the TraG G of Figure 6.1.	108
6.3	Tree T_{TRP} of the TraG G	110
6.4	Modified tree T'_{TRP} of the tree T_{TRP}	119