Supplementary Results of Table 2 and Table 3 in RQ1:

Model	Precision↑	Recall↑	F1↑	MCC↑	AUC-ROC↑	R@20%E↑	E@20%R↓	Popt↑	Accuracy↑		R@20%E_l↑	E@20%R_l↓	IFA_l↓
									Top-5	Top-10			
Deeper	0.1748	0.4295	0.2485	0.1629	0.6772	0.6295	0.0203	0.8274					
LApredict	0.4545	0.0316	0.0591	0.1018	0.6938	0.6253	0.0198	0.8137					
DeepJIT	0.2126	**0.6632**	0.3219	0.2724	0.7911	0.7095	0.0137	0.8736					
JITLine	**0.6391**	0.1789	0.2796	0.3096	0.8087	0.7116	0.0154	0.8852	0.1339	0.1214	0.1935	0.3465	23.2353
JIT-Fine	0.4792	0.3874	0.4284	0.3829	0.8777	0.7768	0.0124	**0.9308**	0.1749	0.1672	0.2088	0.3228	12.8913
JIT-Smart	0.5023	0.4611	0.4808	0.4343	**0.8916**	**0.7916**	**0.0105**	0.9208	0.5409	0.3943	**0.7086**	**0.0989**	0.0822
JIT-Coka	0.5463	0.4842	**0.5134**	**0.4713**	0.8887	0.7853	0.0115	0.9251	**0.5459**	**0.4038**	0.6816	0.1086	**0.0783**

Supplementary Results of Table 4 in RQ3:

Model	Precision↑	Recall↑	F1↑	MCC↑	AUC-ROC↑	R@20%E↑	E@20%R↓	Popt↑	Accuracy↑		R@20%E_l↑	E@20%R_l↓	IFA_l↓
									Top-5	Top-10			
JIT-Coka	0.5463	**0.4842**	**0.5134**	**0.4713**	0.8887	0.7853	0.0115	0.9251	0.5459	0.4038	0.6816	0.1086	**0.0783**
w/o codet5	0.5045	0.4674	0.4852	0.4388	**0.8905**	0.8084	0.0108	0.9355	0.5435	**0.4063**	0.6774	0.1079	0.0811
w/o KANLinear	0.5875	0.3958	0.4730	0.4433	0.8881	**0.8232**	**0.0101**	**0.9423**	**0.5483**	0.4003	0.7089	**0.0936**	0.0957
w/o DLN	**0.5893**	0.4168	0.4883	0.4565	0.8894	0.7284	0.0128	0.8875	0.1992	0.2033	0.1918	0.3444	16.2121
w/o EF	0.3789	0.4547	0.4134	0.3539	0.8610	0.7958	0.0105	0.9280	0.5424	0.3953	**0.7144**	0.1034	0.0833

Supplementary Results of Table 5 in RQ3:

Loss Weight		Precision↑	Recall↑	F1↑	MCC↑	AUC-ROC↑	R@20%E↑	E@20%R↓	Popt↑	Accuracy↑		R@20%E_l↑	E@20%R_l↓	IFA_l↓
λ_{DP}	λ_{DL}									Top-5	Top-10			
0.1	0.9	0.4837	0.4695	0.4765	0.4277	0.8853	0.7832	0.0116	0.9229	0.5466	0.4028	**0.7123**	**0.0969**	0.0807
0.2	0.8	**0.5769**	0.4105	0.4797	0.4467	0.8868	0.7937	0.0117	0.9240	0.5379	0.3973	0.6865	0.1032	0.0923
0.3	0.7	0.5463	**0.4842**	**0.5134**	**0.4713**	**0.8887**	0.7853	0.0115	0.9251	0.5459	0.4038	0.6816	0.1086	**0.0783**
0.4	0.6	0.5083	0.4526	0.4788	0.4334	0.8882	**0.8021**	0.0114	**0.9280**	0.5474	0.4051	0.6950	0.1049	0.0837
0.5	0.5	0.5174	0.4695	0.4923	0.4473	0.8881	0.7916	0.0128	0.9255	0.5478	0.4033	0.6964	0.0980	0.0807
0.6	0.4	0.5208	0.4484	0.4819	0.4382	0.8831	0.7895	0.0118	0.9224	0.5453	0.4069	0.6850	0.1047	0.0845
0.7	0.3	0.4903	0.4779	0.4840	0.4358	0.8885	0.7789	0.0120	0.9226	0.5435	0.4005	0.6858	0.1009	0.0793
0.8	0.2	0.4784	0.4653	0.4717	0.4224	0.8819	0.7853	**0.0112**	0.9221	**0.5518**	**0.4118**	0.6923	0.0999	0.0814
0.9	0.1	0.4715	0.4695	0.4705	0.4203	0.8863	0.7811	0.0115	0.9195	0.5402	0.4004	0.6889	0.1030	0.0807
1	0	0.5403	0.4379	0.4837	0.4431	0.8818	0.7684	0.0112	0.9090	0.5328	0.3934	0.6841	0.1013	**0.3221**