

TABLE I
THE SIGNIFICANT DIFFERENT OF 1-L CNN AND OTHERS MODELS ABOUT NEWLY PUBLISHED VULNERABILITIES FOR SEPTEMBER-DECEMBER IN MULTI-TASK LEARNING

		Severity	Attack	Authentication	Access	Availability	Confidentiality	Integrity
pValue	2-L CNN	0.357386	0.005761	0.005761	0.005761	0.005761	0.005761	0.005509
	1-L BiLSTM	0.174427	0.258135	0.918549	0.082131	0.005761	0.005509	0.005761
	2-L BiLSTM	0.082131	0.014116	0.219768	0.005761	0.005761	0.013616	0.040831
	1-L Attn BiLSTM	0.023721	0.014116	0.005509	0.040831	0.005761	0.005509	0.005761
	2-L Attn BiLSTM	0.138914	0.013617	0.005509	0.013794	0.005761	0.005761	0.005761

TABLE II
THE SIGNIFICANT DIFFERENT OF 2-L CNN AND OTHERS MODELS ABOUT NEWLY PUBLISHED VULNERABILITIES FOR SEPTEMBER-DECEMBER IN MULTI-TASK LEARNING

		Severity	Attack	Authentication	Access	Availability	Confidentiality	Integrity
pValue	1-L CNN	0.357385	0.005761	0.005761	0.005761	0.005761	0.005761	0.005509
	1-L BiLSTM	0.471767	0.005761	0.005509	0.005761	0.005761	0.005761	0.005761
	2-L BiLSTM	0.722339	0.005761	0.005761	0.005761	0.101799	0.014116	0.005761
	1-L Attn BiLSTM	0.539498	0.005761	0.005761	0.005761	0.005761	0.005761	0.005761
	2-L Attn BiLSTM	0.471767	0.005761	0.005509	0.005761	0.005761	0.005761	0.005761

TABLE III
THE SIGNIFICANT DIFFERENCE OF 1-L BiLSTM AND OTHERS MODELS ABOUT NEWLY PUBLISHED VULNERABILITIES FOR SEPTEMBER-DECEMBER IN MULTI-TASK LEARNING

		Severity	Attack	Authentication	Access	Availability	Confidentiality	Integrity
pValue	1-L CNN	0.174427	0.258135	0.918549	0.082131	0.005761	0.005509	0.005761
	2-L CNN	0.471767	0.005761	0.005509	0.005761	0.005761	0.005761	0.005761
	2-L BiLSTM	0.101799	0.013616	0.183714	0.101799	0.005761	0.005761	0.005509
	1-L Attn BiLSTM	0.012870	0.286422	0.041307	0.041307	0.013794	0.005761	0.034509
	2-L Attn BiLSTM	0.357386	0.014116	0.040831	0.005761	0.005761	0.217347	0.005761

TABLE IV
THE SIGNIFICANT DIFFERENCE OF 2-L BiLSTM AND OTHERS MODELS ABOUT NEWLY PUBLISHED VULNERABILITIES FOR SEPTEMBER-DECEMBER IN MULTI-TASK LEARNING

		Severity	Attack	Authentication	Access	Availability	Confidentiality	Integrity
pValue	1-L CNN	0.082131	0.014116	0.219768	0.005761	0.005761	0.013616	0.040831
	2-L CNN	0.722339	0.005761	0.005761	0.005761	0.101799	0.014116	0.005761
	1-L BiLSTM	0.101799	0.013616	0.183714	0.101799	0.005761	0.005761	0.005509
	1-L Attn BiLSTM	0.471767	0.014116	0.014116	0.005761	0.005761	0.005761	0.005761
	2-L Attn BiLSTM	0.403288	0.014116	0.013616	0.005761	0.005761	0.005761	0.005761

TABLE V
THE SIGNIFICANT DIFFERENCE OF 1-L ATTN BiLSTM AND OTHERS MODELS ABOUT NEWLY PUBLISHED VULNERABILITIES FOR SEPTEMBER-DECEMBER IN MULTI-TASK LEARNING

		Severity	Attack	Authentication	Access	Availability	Confidentiality	Integrity
pValue	1-L CNN	0.023721	0.014116	0.005509	0.040831	0.005761	0.005509	0.005761
	2-L CNN	0.539498	0.005761	0.005761	0.005761	0.005761	0.005761	0.005761
	1-L BiLSTM	0.012870	0.286422	0.041307	0.041307	0.013794	0.005761	0.034509
	2-L BiLSTM	0.471767	0.014116	0.014116	0.005761	0.005761	0.005761	0.005761
	2-L Attn BiLSTM	0.837944	0.101799	0.680923	0.040831	0.139527	0.607249	0.005761

TABLE VI
THE SIGNIFICANT DIFFERENCE OF 2-L ATTN BiLSTM AND OTHERS MODELS ABOUT NEWLY PUBLISHED VULNERABILITIES FOR
SEPTEMBER-DECEMBER IN MULTI-TASK LEARNING

		Severity	Attack	Authentication	Access	Availability	Confidentiality	Integrity
pValue	1-L CNN	0.138914	0.013617	0.005509	0.013794	0.005761	0.005761	0.005761
	2-L CNN	0.471767	0.005761	0.005509	0.005761	0.005761	0.005761	0.005761
	1-L BiLSTM	0.357386	0.014116	0.040831	0.005761	0.005761	0.217347	0.005761
	2-L BiLSTM	0.403288	0.014116	0.013616	0.005761	0.005761	0.005761	0.005761
	1-L Attn BiLSTM	0.837944	0.101799	0.680923	0.040831	0.139527	0.607249	0.005761