

Table S1: Accuracy measured by using t -test.

ID	GD		GDM		GDA		NM		LM		DNN		BTE		MVE		NDTF	
	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF
D1	52.4	54.5	46	51.6	44.6	52.4	54	55	52.4	63.1	55	59.5	55	55	49.2	59.2	54.5	59.6
D2	53	59.4	49.51	54.430	45	53	43	49.61	52	59.6	59	63.3	56	56	54	61	53	59
D3	54	59	46	49.92	51	56	50	55	52	56	59	64.9	46	50	52	56	56	60
D4	53	55	46	49	52	55	51	56	50	53	56	59.1	46	50	51	53	54	60
D5	50	53	42	46.9	52	56	45	52	50.3	56.5	54	59.1	46	52	53	54	55	61
D6	50	53	51	59.9	46	52	45	54	50	54	52	61.1	46	49.9	51	54	53	55
D7	44	49	53	59.9	51	56	40	45	51	59	50	55	42	46	50	53	52	55
D8	44	53	46	49.9	52	59	54	59	53	59	55	61.1	42	45	52	55	56	60.1
D9	44	52	44	49.9	50	54	51	54	53	55	55	65	51	56	53	60	59	66
D10	44	52	42	49.9	54	59	51	59	42	56	54	64.4	46	55	51	59	55	64
D11	46	59	46	49.9	51	52	40	55	52	62	49	54.1	41	52	54	62	56	66
D12	45	59	44	52.3	41	55	40	54	42	56	49	55.1	42	50	52	56	46	60.0
D13	43	59	56	69.2	41	56	46	55	42	56	49	64.1	45	53	50	56	51	62
D14	54	52	46	59.95	44	52	55	60	54	61	45	64.1	42	50	54	60	51	62.0
D15	51	56	56	59.91	51	61	40	55	52	56	51	64.31	56	60	54	56	55	65
D16	44	59	46	49.9	51	56	40	57.5	55.1	66.4	51	62.1	46	50	52	56	51	62
D17	44	58	46	52.9	50	61	50	55	42	56	49	63	46	54	42	61	46	62
D18	44	52	46	52.4	44	56	55	61	52	60	59	64	56	60	52	61	56	65
D19	41	59	56	59.94	51	59	46	55	50	56	52	62.1	41	52	50	55	52	66
D20	44	55	54	61.6	51	62	40	52	50	59	45	62.3	54	60	50	59	52	61
D21	54	61	42	59.9	50	55	45	52	50	59	51	61.2	56	59	41	56	46	55
D22	44	52	44	59	51	56	42	50	51	55	51	62	56	62	52	61	56	63.9
D23	44	55	46	59	51	58	45	59	42	56	49	60	40	55	42	56	46	63
D24	54	58	46	59.9	51	56	50	59	45	56	59	62.3	46	55	52	62	56	62
D25	45	59	46	55	55	61	49	52	50	59	52	62	51	62.8	52	61	56	61.5
D26	40	52	46	55	50	61	50	59	52	56	59	64	56	60	52	61	58	62.5
D27	44	59	46	51.2	50	55	50	55	50	55	52	61.5	50	59	53	61	57.8	62.6
D28	54	59	51	59.8	51	60.1	50	61.5	52	60.2	59	63.7	56	59	53	61.5	59	63.5
D29	44	52.6	41	52.2	41	56.4	50.4	55.5	52.5	59.6	51	66.1	46	50.5	55.9	60.9	51	66.4
D30	51	59	52	59.9	51	58	50	55	52	56	59	64.1	53	58	52	56	56	62

Table S2: F-Measure measured by using t -test.

ID	GD		GDM		GDA		NM		LM		DNN		BTE		MVE		NDTF	
	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF
D1	0.49	0.56	0.41	0.59	0.46	0.59	0.50	0.53	0.49	0.55	0.45	0.52	0.49	0.52	0.42	0.55	0.49	0.54
D2	0.42	0.56	0.49	0.51	0.49	0.53	0.46	0.55	0.44	0.60	0.49	0.552	0.45	0.59	0.45	0.54	0.45	0.594
D3	0.44	0.59	0.44	0.59	0.41	0.52	0.45	0.50	0.45	0.56	0.49	0.55	0.46	0.55	0.41	0.59	0.46	0.54
D4	0.42	0.54	0.462	0.59	0.42	0.54	0.41	0.56	0.40	0.56	0.42	0.53	0.44	0.53	0.45	0.53	0.45	0.59
D5	0.40	0.52	0.42	0.50	0.42	0.56	0.44	0.52	0.43	0.52	0.41	0.551	0.46	0.52	0.43	0.54	0.45	0.59
D6	0.44	0.55	0.44	0.54	0.46	0.52	0.45	0.52	0.41	0.52	0.42	0.53	0.46	0.521	0.42	0.524	0.44	0.520
D7	0.44	0.569	0.43	0.59	0.46	0.56	0.46	0.54	0.51	0.559	0.50	0.55	0.42	0.56	0.50	0.54	0.52	0.55
D8	0.50	0.54	0.51	0.59	0.52	0.54	0.52	0.54	0.52	0.54	0.56	0.61	0.50	0.55	0.521	0.541	0.551	0.59
D9	0.44	0.52	0.45	0.59	0.45	0.52	0.44	0.54	0.43	0.55	0.45	0.55	0.51	0.56	0.45	0.59	0.45	0.60
D10	0.44	0.52	0.42	0.53	0.44	0.52	0.45	0.56	0.45	0.53	0.44	0.52	0.46	0.51	0.45	0.50	0.45	0.51
D11	0.46	0.53	0.44	0.52	0.45	0.52	0.45	0.52	0.45	0.52	0.49	0.54	0.44	0.52	0.51	0.56	0.53	0.59
D12	0.45	0.51	0.44	0.53	0.49	0.52	0.50	0.54	0.52	0.56	0.49	0.53	0.51	0.59	0.522	0.56	0.56	0.60
D13	0.53	0.61	0.52	0.59	0.46	0.50	0.46	0.52	0.50	0.56	0.52	0.64	0.53	0.62	0.50	0.61	0.51	0.62
D14	0.49	0.52	0.46	0.55	0.54	0.59	0.54	0.59	0.50	0.55	0.55	0.62	0.54	0.62	0.54	0.61	0.49	0.55
D15	0.51	0.56	0.46	0.59	0.52	0.56	0.45	0.52	0.52	0.56	0.51	0.61	0.56	0.59	0.45	0.56	0.55	0.64
D16	0.44	0.50	0.53	0.59	0.51	0.56	0.49	0.55	0.56	0.60	0.51	0.59	0.46	0.51	0.51	0.55	0.50	0.59
D17	0.49	0.53	0.46	0.51	0.51	0.57	0.52	0.58	0.49	0.54	0.59	0.62	0.56	0.58	0.56	0.59	0.57	0.60
D18	0.46	0.51	0.46	0.54	0.44	0.51	0.35	0.59	0.54	0.59	0.59	0.62	0.57	0.61	0.52	0.61	0.56	0.63
D19	0.49	0.52	0.52	0.61	0.57	0.60	0.52	0.62	0.45	0.52	0.52	0.6	0.49	0.54	0.45	0.51	0.54	0.61
D20	0.45	0.54	0.44	0.56	0.57	0.59	0.58	0.62	0.50	0.56	0.51	0.62	0.514	0.61	0.45	0.52	0.52	0.59
D21	0.51	0.58	0.41	0.52	0.45	0.51	0.45	0.52	0.50	0.59	0.51	0.61	0.46	0.59	0.41	0.50	0.41	0.55
D22	0.50	0.56	0.51	0.59	0.49	0.56	0.54	0.59	0.41	0.51	0.50	0.59	0.46	0.52	0.50	0.56	0.51	0.61
D23	0.54	0.59	0.56	0.61	0.51	0.58	0.51	0.59	0.52	0.56	0.49	0.56	0.54	0.59	0.52	0.56	0.56	0.60
D24	0.49	0.53	0.46	0.54	0.51	0.56	0.45	0.55	0.45	0.51	0.50	0.61	0.41	0.50	0.52	0.59	0.51	0.59
D25	0.51	0.54	0.46	0.51	0.52	0.56	0.50	0.57	0.52	0.59	0.51	0.61	0.51	0.56	0.52	0.59	0.46	0.55
D26	0.40	0.52	0.41	0.55	0.40	0.59	0.53	0.58	0.52	0.56	0.59	0.63	0.56	0.60	0.52	0.56	0.56	0.62
D27	0.48	0.55	0.56	0.60	0.50	0.55	0.51	0.59	0.45	0.56	0.51	0.59	0.40	0.55	0.41	0.56	0.55	0.63
D28	0.44	0.59	0.51	0.61	0.51	0.59	0.45	0.59	0.50	0.59	0.51	0.60	0.51	0.61	0.52	0.58	0.52	0.59
D29	0.52	0.58	0.54	0.62	0.41	0.54	0.44	0.51	0.44	0.54	0.41	0.56	0.46	0.55	0.52	0.59	0.51	0.60
D30	0.41	0.52	0.46	0.59	0.51	0.56	0.45	0.54	0.51	0.55	0.52	0.61	0.49	0.55	0.51	0.55	0.51	0.60

Table S3: Accuracy measured by using ULR analysis.

ID	GD		GDM		GDA		NM		LM		DNN		BTE		MVE		NDTF	
	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF
D1	51.4	54.9	48	54.6	47.6	55.4	53	57	55.4	62.1	53	58.5	51.5	55.9	50.2	59.9	58.5	60.6
D2	52	59.4	49.3	54.0	48	53.9	46	52.61	53	59.9	59.8	63.9	52	56.7	54.6	61.3	53.6	59.8
D3	54.2	59.5	48.2	51.2	51.2	56.3	53	55.5	52.2	56.5	59.3	65.2	46.8	50.6	52.2	56.7	56.4	60.3
D4	53.5	55.9	46.8	49.9	52.2	55.7	51.2	56.6	50.3	53.4	56.2	59.9	46.6	50.2	51.3	53.6	54.6	60.5
D5	50.2	53.4	42.5	47.2	52.3	56.5	45.5	52.6	51.3	57.5	54.3	59.9	46.6	52.2	53.4	54.6	55.5	61.3
D6	50	53	51	59.9	46	52	45	54	50	54	52	61.1	46	49.9	51	54	53	55
D7	44	49	53	59.9	51	56	40	45	51	59	50	55	42	46	50	53	52	55
D8	44	53	46	49.9	52	59	54	59	53	59	55	61.1	42	45	52	55	56	60.1
D9	44	52	44	49.9	50	54	51	54	53	55	55	65	51	56	53	60	59	66
D10	44	52	42	49.9	54	59	51	59	42	56	54	64.4	46	55	51	59	55	64
D11	46	59	46	49.9	51	52	40	55	52	62	49	54.1	41	52	54	62	56	66
D12	45	59	44	52.3	41	55	40	54	42	56	49	55.1	42	50	52	56	46	60.0
D13	43	59	56	60.2	41	56	46	55	42	56	49	64.1	45	53	50	56	51	62
D14	50.6	56.8	46.9	59.2	44.3	58.4	55.4	62.8	54.8	61.9	48.5	62.1	42.4	57.8	54.3	61.3	52.8	61.9
D15	51.2	57.3	57.2	59.2	51.8	60.9	43.5	55.9	52.9	56.9	52.8	61.8	56.9	61.3	54.9	58.9	58.9	65.9
D16	44.2	59.3	46.1	49.3	51.2	56.8	42.1	59.5	58.1	66.9	51.2	63.1	46.8	50.8	52.2	56.9	51.2	62.4
D17	44.4	58.9	46.3	53.9	50.3	61.2	50.9	55.8	43	56.9	51.8	63.9	46.8	54.8	42.3	61.3	46.7	62.8
D18	44.2	52.3	46.1	52.9	44.8	56.8	54	62	53	62	59.8	64.3	56.8	61.2	53	61.8	58	65.8
D19	43	59.2	56.2	58.94	53.2	59.3	48	57.3	52	58.3	53	62.9	46.8	53.8	52	58.1	53	66.1
D20	49	54.1	54.2	62.6	51.9	62.1	48	52.2	53	59.3	48	61.9	53	61.2	53	59.8	53	61.9
D21	54.2	61.2	43	58.9	52	57.2	49	53.1	52	59.8	53	63.2	56.9	59.8	43.1	58.1	49	55.2
D22	46	52.2	49	59.2	53	59.2	43	50.2	53	55.9	51	62	56	62	52	61	56	63.9
D23	44	55	46	59	51	58	45	59	42	56	49	60	40	55	42	56	46	63
D24	54	58	46	59.9	51	56	50	59	45	56	59	62.3	46	55	52	62	56	62
D25	45	59	46	55	55	61	49	52	50	59	52	62	51	62.8	52	61	56	61.5
D26	40	52	46	55	50	61	50	59	52	56	59	64	56	60	52	61	58	62.5
D27	44	59	46	51.2	50	55	50	55	50	55	52	61.5	50	59	53	61	57.8	62.6
D28	54	59	51	59.8	51	60.1	50	61.5	52	60.2	59	63.7	56	59	53	61.5	59	63.5
D29	44	52.6	41	52.2	41	56.4	50.4	55.5	52.5	59.6	51	66.1	46	50.5	55.9	60.9	51	66.4
D30	53	59.8	52.2	59.2	51	58	50	55	52	56	59	64.1	53	58	52	56.3	56.9	62.2

Table S4: F-Measure measured by ULR analysis.

ID	GD		GDM		GDA		NM		LM		DNN		BTE		MVE		NDTF	
	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF
D1	0.60	0.68	0.58	0.591	0.52	0.53	0.52	0.58	0.50	0.59	0.48	0.53	0.49	0.57	0.43	0.52	0.51	0.57
D2	0.44	0.57	0.52	0.57	0.50	0.56	0.48	0.56	0.47	0.60	0.51	0.57	0.47	0.59	0.47	0.58	0.47	0.59
D3	0.47	0.58	0.48	0.58	0.46	0.57	0.47	0.58	0.49	0.59	0.51	0.58	0.49	0.57	0.48	0.59	0.48	0.58
D4	0.44	0.57	0.49	0.58	0.47	0.57	0.47	0.59	0.49	0.58	0.48	0.57	0.49	0.58	0.48	0.59	0.49	0.60
D5	0.48	0.58	0.47	0.52	0.47	0.57	0.48	0.53	0.43	0.41	0.551	0.551	0.46	0.52	0.43	0.54	0.45	0.59
D6	0.48	0.54	0.48	0.57	0.48	0.53	0.46	0.53	0.41	0.52	0.42	0.53	0.46	0.521	0.42	0.524	0.44	0.52
D7	0.45	0.57	0.45	0.59	0.46	0.57	0.46	0.56	0.51	0.58	0.51	0.58	0.47	0.58	0.51	0.58	0.49	0.56
D8	0.52	0.57	0.52	0.58	0.53	0.58	0.52	0.59	0.52	0.54	0.56	0.62	0.52	0.58	0.53	0.57	0.55	0.60
D9	0.49	0.58	0.49	0.59	0.47	0.53	0.48	0.58	0.47	0.58	0.48	0.59	0.57	0.59	0.48	0.59	0.49	0.60
D10	0.49	0.58	0.47	0.57	0.48	0.58	0.47	0.57	0.47	0.58	0.47	0.59	0.46	0.57	0.45	0.54	0.45	0.57
D11	0.45	0.54	0.43	0.53	0.46	0.53	0.46	0.53	0.46	0.53	0.48	0.54	0.44	0.52	0.51	0.56	0.53	0.59
D12	0.46	0.52	0.45	0.52	0.48	0.51	0.51	0.53	0.53	0.57	0.48	0.53	0.51	0.59	0.522	0.56	0.56	0.60
D13	0.52	0.62	0.53	0.58	0.45	0.51	0.45	0.51	0.51	0.55	0.52	0.64	0.53	0.62	0.50	0.61	0.51	0.62
D14	0.51	0.55	0.47	0.56	0.52	0.58	0.53	0.58	0.51	0.54	0.55	0.62	0.54	0.62	0.54	0.60	0.49	0.59
D15	0.52	0.58	0.45	0.58	0.51	0.57	0.46	0.51	0.51	0.57	0.51	0.61	0.56	0.59	0.45	0.56	0.55	0.64
D16	0.46	0.52	0.52	0.58	0.52	0.55	0.48	0.54	0.55	0.61	0.51	0.59	0.46	0.51	0.51	0.55	0.50	0.59
D17	0.51	0.58	0.45	0.50	0.51	0.57	0.51	0.57	0.48	0.53	0.59	0.62	0.56	0.58	0.56	0.59	0.57	0.61
D18	0.45	0.50	0.45	0.53	0.43	0.50	0.54	0.58	0.53	0.58	0.59	0.62	0.57	0.61	0.52	0.61	0.56	0.63
D19	0.48	0.51	0.51	0.60	0.56	0.61	0.51	0.61	0.44	0.52	0.52	0.6	0.49	0.54	0.45	0.51	0.54	0.61
D20	0.48	0.53	0.45	0.55	0.56	0.58	0.57	0.61	0.51	0.55	0.51	0.62	0.514	0.61	0.45	0.52	0.52	0.59
D21	0.52	0.57	0.42	0.53	0.46	0.50	0.46	0.51	0.51	0.59	0.53	0.62	0.46	0.59	0.41	0.50	0.41	0.55
D22	0.51	0.55	0.52	0.58	0.48	0.55	0.53	0.58	0.40	0.50	0.51	0.59	0.46	0.52	0.50	0.56	0.51	0.61
D23	0.53	0.58	0.55	0.60	0.50	0.57	0.50	0.58	0.52	0.56	0.49	0.56	0.54	0.59	0.52	0.56	0.56	0.60
D24	0.48	0.52	0.47	0.53	0.52	0.55	0.46	0.56	0.46	0.52	0.51	0.61	0.41	0.50	0.52	0.59	0.51	0.59
D25	0.50	0.53	0.47	0.50	0.53	0.55	0.51	0.56	0.51	0.58	0.50	0.61	0.51	0.56	0.52	0.59	0.46	0.55
D26	0.41	0.51	0.40	0.56	0.41	0.58	0.52	0.57	0.53	0.57	0.59	0.63	0.56	0.60	0.52	0.56	0.56	0.62
D27	0.47	0.54	0.55	0.61	0.51	0.54	0.50	0.58	0.46	0.55	0.50	0.59	0.40	0.55	0.41	0.56	0.55	0.63
D28	0.47	0.58	0.52	0.60	0.50	0.58	0.44	0.58	0.51	0.59	0.51	0.61	0.51	0.61	0.52	0.58	0.52	0.59
D29	0.51	0.57	0.53	0.60	0.40	0.53	0.43	0.50	0.43	0.53	0.41	0.56	0.46	0.55	0.52	0.59	0.51	0.61
D30	0.47	0.51	0.47	0.58	0.50	0.55	0.46	0.55	0.52	0.54	0.51	0.61	0.49	0.55	0.51	0.55	0.56	0.60

Table S5: Accuracy measured by using Cross correlation analysis.

ID	GD		GDM		GDA		NM		LM		DNN		BTE		MVE		NDTF	
	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF
D1	53.4	57.9	48	54.6	47.6	55.4	53	57	57.4	63.1	53	58.5	51.5	55.9	50.2	59.9	58.5	60.6
D2	53.2	59.4	49.3	54.0	48	53.9	46	52.61	53	59.9	59.8	62.3	52	56.7	54.6	61.3	53.6	59.8
D3	54.2	59.5	48.2	51.2	51.2	56.3	53	55.5	52.2	56.5	59.3	64.2	46.8	50.6	52.2	56.7	56.4	60.3
D4	53.5	55.9	46.8	49.9	52.2	55.7	51.2	56.6	50.3	53.4	56.2	59.9	46.6	50.2	51.3	53.6	54.6	62.5
D5	50.2	53.4	42.5	47.2	52.3	56.5	45.5	52.6	51.3	57.5	54.3	59.9	46.6	52.2	53.4	54.6	55.5	62.3
D6	53	59	51	59.9	46	52	45	54	50	54	52	62.1	46	49.9	51	54	53	55
D7	49	59	53	60.9	51	56	40	45	51	59	50	55	42	46	50	53	52	55
D8	49	53	46	49.9	52	59	54	59	53	59	55	61.9	42	45	52	55	56	60.1
D9	54	59.8	44	49.9	50	54	51	54	53	55	55	65	51	56	53	60	59	66
D10	56	59	42	49.9	54	59	51	59	42	56	54	64.4	46	55	51	59	55	64
D11	56	59.9	46	49.9	51	52	40	55	52	62	49	54.1	41	52	54	62	56	66
D12	55.2	59	44	52.3	41	55	40	54	42	56	49	55.1	42	50	52	56	46	60.0
D13	53.8	59	56	60.2	41	56	46	55	42	56	49	64.1	45	53	50	56	51	62
D14	50.6	56.8	46.9	59.2	44.3	58.4	55.4	62.8	54.8	61.9	48.5	62.1	42.4	57.8	54.3	61.3	52.8	61.9
D15	51.2	57.3	57.2	59.2	51.8	60.9	43.5	55.9	52.9	56.9	52.8	61.8	56.9	61.3	54.9	58.9	58.9	65.9
D16	44.2	59.3	46.1	49.3	51.2	56.8	42.1	59.5	58.1	66.9	51.2	63.1	46.8	50.8	52.2	56.9	51.2	62.4
D17	44.4	58.9	46.3	53.9	50.3	61.2	50.9	55.8	43	56.9	51.8	63.9	46.8	54.8	42.3	61.3	46.7	62.8
D18	44.2	52.3	46.1	52.9	44.8	56.8	54	62	53	62	59.8	64.3	56.8	61.2	53	61.8	58	65.8
D19	43	59.2	56.2	58.94	53.2	59.3	48	57.3	52	58.3	53	62.9	46.8	53.8	52	58.1	53	66.1
D20	49	54.1	54.2	62.6	51.9	62.1	48	52.2	53	59.3	48	61.9	53	61.2	53	59.8	53	61.9
D21	54.2	61.2	43	58.9	52	57.2	49	53.1	52	59.8	53	63.2	56.9	59.8	43.1	58.1	49	55.2
D22	46	52.2	49	59.2	53	59.2	43	50.2	53	55.9	51	62	56	62	52	61	56	63.9
D23	44	55	46	59	51	58	45	59	42	56	49	60	40	55	42	56	46	63
D24	54	58	46	59.9	51	56	50	59	45	56	59	62.3	46	55	52	62	56	62
D25	45	59	46	55	55	61	49	52	50	59	52	62	51	62.8	52	61	56	61.5
D26	40	52	46	55	50	61	50	59	52	56	59	64	56	60	52	61	58	62.5
D27	44	59	46	51.2	50	55	50	55	50	55	52	61.5	50	59	53	61	57.8	62.6
D28	54	59	51	59.8	51	60.1	50	61.5	52	60.2	59	63.7	56	59	53	61.5	59	63.5
D29	44	52.6	41	52.2	41	56.4	50.4	55.5	52.5	59.6	51	66.1	46	50.5	55.9	60.9	51	66.4
D30	53	59.8	52.2	59.2	51	58	50	55	52	56	59	64.1	53	58	52	56.3	56.9	62.2

Table S6: F-Measure measured by using Cross correlation analysis.

ID	GD		GDM		GDA		NM		LM		DNN		BTE		MVE		NDTF	
	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF
D1	0.52	0.57	0.51	0.58	0.50	0.52	0.58	0.50	0.62	0.50	0.55	0.51	0.57	0.50	0.58	0.51	0.57	
D2	0.52	0.57	0.51	0.58	0.50	0.56	0.51	0.58	0.61	0.51	0.57	0.51	0.59	0.50	0.58	0.51	0.59	
D3	0.52	0.58	0.53	0.58	0.51	0.57	0.52	0.51	0.58	0.50	0.60	0.52	0.59	0.51	0.59	0.51	0.58	
D4	0.52	0.57	0.52	0.58	0.51	0.57	0.50	0.58	0.51	0.57	0.56	0.50	0.58	0.50	0.59	0.51	0.60	
D5	0.51	0.58	0.51	0.58	0.50	0.57	0.51	0.58	0.51	0.56	0.59	0.51	0.59	0.53	0.55	0.55	0.61	
D6	0.51	0.54	0.50	0.55	0.55	0.58	0.50	0.57	0.58	0.57	0.63	0.56	0.59	0.52	0.58	0.55	0.60	
D7	0.51	0.57	0.55	0.58	0.52	0.57	0.50	0.55	0.57	0.51	0.58	0.50	0.58	0.51	0.58	0.50	0.59	
D8	0.52	0.57	0.53	0.58	0.54	0.58	0.52	0.58	0.51	0.56	0.61	0.52	0.58	0.53	0.57	0.55	0.60	
D9	0.50	0.57	0.51	0.58	0.50	0.57	0.50	0.58	0.51	0.58	0.60	0.54	0.59	0.52	0.59	0.59	0.60	
D10	0.52	0.58	0.50	0.57	0.52	0.58	0.50	0.57	0.51	0.58	0.52	0.52	0.57	0.51	0.58	0.51	0.59	
D11	0.50	0.55	0.50	0.56	0.50	0.57	0.51	0.53	0.50	0.57	0.57	0.51	0.59	0.51	0.56	0.53	0.61	
D12	0.50	0.56	0.50	0.57	0.50	0.57	0.51	0.54	0.51	0.58	0.57	0.50	0.59	0.52	0.56	0.56	0.60	
D13	0.52	0.60	0.51	0.58	0.50	0.58	0.50	0.57	0.55	0.52	0.65	0.53	0.62	0.50	0.61	0.51	0.62	
D14	0.51	0.55	0.50	0.56	0.52	0.58	0.54	0.58	0.51	0.54	0.62	0.55	0.61	0.55	0.60	0.59	0.59	
D15	0.52	0.58	0.55	0.58	0.51	0.55	0.54	0.58	0.51	0.55	0.60	0.55	0.59	0.55	0.56	0.55	0.65	
D16	0.50	0.57	0.52	0.58	0.50	0.55	0.50	0.54	0.55	0.62	0.51	0.59	0.51	0.55	0.50	0.59	0.59	
D17	0.51	0.58	0.55	0.50	0.51	0.57	0.51	0.57	0.51	0.54	0.50	0.52	0.58	0.51	0.59	0.57	0.61	
D18	0.51	0.58	0.53	0.57	0.50	0.58	0.50	0.58	0.56	0.58	0.62	0.57	0.61	0.52	0.61	0.56	0.63	
D19	0.50	0.58	0.51	0.60	0.56	0.61	0.51	0.61	0.54	0.51	0.6	0.51	0.58	0.55	0.59	0.55	0.61	
D20	0.50	0.56	0.51	0.58	0.50	0.58	0.52	0.61	0.51	0.55	0.62	0.51	0.61	0.55	0.61	0.52	0.59	
D21	0.51	0.56	0.51	0.52	0.51	0.55	0.51	0.56	0.52	0.57	0.62	0.56	0.59	0.51	0.58	0.51	0.55	
D22	0.52	0.56	0.51	0.57	0.51	0.55	0.53	0.57	0.51	0.50	0.59	0.51	0.58	0.50	0.56	0.51	0.61	
D23	0.54	0.58	0.57	0.60	0.52	0.59	0.52	0.58	0.53	0.55	0.56	0.55	0.59	0.52	0.56	0.56	0.60	
D24	0.50	0.56	0.52	0.57	0.52	0.55	0.50	0.58	0.56	0.58	0.51	0.51	0.59	0.52	0.59	0.51	0.59	
D25	0.50	0.56	0.50	0.59	0.53	0.55	0.51	0.58	0.53	0.58	0.61	0.51	0.56	0.52	0.59	0.56	0.60	
D26	0.51	0.53	0.52	0.54	0.51	0.58	0.54	0.57	0.53	0.57	0.63	0.56	0.60	0.52	0.56	0.56	0.62	
D27	0.57	0.56	0.57	0.61	0.51	0.54	0.52	0.58	0.54	0.55	0.58	0.50	0.55	0.51	0.56	0.55	0.63	
D28	0.52	0.58	0.52	0.60	0.52	0.58	0.56	0.58	0.51	0.58	0.61	0.51	0.61	0.52	0.58	0.52	0.59	
D29	0.53	0.57	0.56	0.61	0.50	0.54	0.54	0.50	0.54	0.50	0.56	0.56	0.55	0.52	0.59	0.51	0.61	
D30	0.57	0.51	0.55	0.58	0.50	0.55	0.54	0.54	0.50	0.54	0.63	0.59	0.55	0.51	0.55	0.56	0.60	

Table S7: Accuracy measured by using Multivariate linear regression stepwise forward selection.

ID	GD		GDM		GDA		NM		LM		DNN		BTE		MVE		NDTF	
	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF
D1	53.4	57.9	48	54.6	47.6	55.4	53	57	57.4	63.1	53	58.5	51.5	55.9	50.2	59.9	58.5	60.6
D2	53.2	59.4	49.3	54.0	48	53.9	46	52.61	53	59.9	59.8	62.3	52	56.7	54.6	61.3	53.6	59.8
D3	54.2	59.5	48.2	51.2	51.2	56.3	53	55.5	52.2	56.5	59.3	64.2	46.8	50.6	52.2	56.7	56.4	60.3
D4	53.5	55.9	46.8	49.9	52.2	55.7	51.2	56.6	50.3	53.4	56.2	59.9	46.6	50.2	51.3	53.6	54.6	62.5
D5	50.2	53.4	42.5	47.2	52.3	56.5	45.5	52.6	51.3	57.5	54.3	59.9	46.6	52.2	53.4	54.6	55.5	62.3
D6	53	59	51	59.9	46	52	45	54	50	54	52	62.1	46	49.9	51	54	53	55
D7	49	59	53	60.9	51	56	40	45	51	59	50	55	42	46	50	53	52	55
D8	49	53	46	49.9	52	59	54	59	53	59	55	61.9	42	45	52	55	56	60.1
D9	54	59.8	44	49.9	50	54	51	54	53	55	55	65	51	56	53	60	59	66
D10	56	59	42	49.9	54	59	51	59	42	56	54	64.4	46	55	51	59	55	64
D11	56	59.9	46	49.9	51	52	40	55	52	62	49	54.1	41	52	54	62	56	66
D12	55.2	59	44	52.3	41	55	40	54	42	56	49	55.1	42	50	52	56	46	60.0
D13	53.8	59	56	60.2	41	56	46	55	42	56	49	64.1	45	53	50	56	51	62
D14	50.6	56.8	46.9	59.2	44.3	58.4	55.4	62.8	54.8	61.9	48.5	62.1	42.4	57.8	54.3	61.3	52.8	61.9
D15	51.2	57.3	57.2	59.2	51.8	60.9	43.5	55.9	52.9	56.9	52.8	61.8	56.9	61.3	54.9	58.9	58.9	65.9
D16	54.2	59.3	46.1	49.3	51.2	56.8	42.1	59.5	58.1	67.9	51.2	63.1	46.8	50.8	52.2	56.9	51.2	62.4
D17	54.4	58.9	46.3	53.9	50.3	61.2	50.9	55.8	43	56.9	51.8	64.9	46.8	54.8	42.3	61.3	46.7	62.8
D18	54.2	58.3	46.1	52.9	44.8	56.8	54	62	53	62	59.8	64.3	56.8	61.2	53	61.8	58	65.8
D19	43	59.2	56.2	58.94	53.2	59.3	48	57.3	52	58.3	53	62.9	46.8	53.8	52	58.1	53	66.1
D20	50.3	54.1	54.2	62.6	51.9	62.1	48	52.2	53	59.3	48	61.9	53	61.2	53	59.8	53	61.9
D21	54.2	61.2	43	58.9	52	57.2	49	53.1	52	59.8	53	63.2	56.9	59.8	43.1	58.1	49	55.2
D22	51.2	57.2	49	59.2	53	59.2	43	50.2	53	55.9	51	62	56	62	52	61	56	63.9
D23	54	59.8	46	59	51	58	45	59	42	56	49	60	40	55	42	56	46	63
D24	54	58	46	59.9	51	56	50	59	45	56	59	62.3	46	55	52	62	56	62
D25	45	59	46	55	55	61	49	52	50	59	52	62	51	62.8	52	61	56	61.5
D26	49.9	53.9	46	55	50	61	50	59	52	56	59	64	56	60	52	61	58	62.5
D27	52.3	59	46	51.2	50	55	50	55	50	55	52	61.5	50	59	53	61	57.8	62.6
D28	54	59	51	59.8	51	60.1	50	61.5	52	60.2	59	63.7	56	59	53	61.5	59	63.5
D29	51.8	59.6	41	52.2	41	56.4	50.4	55.5	52.5	59.6	51	66.1	46	50.5	55.9	60.9	51	66.4
D30	53	59.8	52.2	59.2	51	58	50	55	52	56	59	64.1	53	58	52	56.3	56.9	62.2

Table S8: F-Measure measured by using Multivariate linear regression stepwise forward selection.

ID	GD		GDM		GDA		NM		LM		DNN		BTE		MVE		NDTF	
	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF
D1	0.52	0.57	0.51	0.58	0.52	0.58	0.52	0.58	0.62	0.50	0.55	0.51	0.57	0.50	0.58	0.51	0.57	
D2	0.52	0.57	0.51	0.57	0.52	0.56	0.51	0.58	0.62	0.51	0.57	0.51	0.59	0.50	0.58	0.51	0.59	
D3	0.50	0.58	0.53	0.58	0.51	0.57	0.52	0.57	0.58	0.50	0.60	0.52	0.59	0.51	0.59	0.51	0.58	
D4	0.52	0.57	0.52	0.58	0.53	0.57	0.52	0.58	0.51	0.57	0.57	0.50	0.58	0.50	0.59	0.51	0.60	
D5	0.51	0.58	0.51	0.56	0.52	0.57	0.53	0.58	0.56	0.52	0.59	0.51	0.59	0.53	0.55	0.55	0.61	
D6	0.51	0.56	0.50	0.55	0.55	0.58	0.52	0.59	0.58	0.57	0.63	0.56	0.59	0.52	0.58	0.55	0.60	
D7	0.50	0.59	0.57	0.59	0.50	0.57	0.52	0.55	0.57	0.51	0.58	0.50	0.58	0.51	0.58	0.50	0.59	
D8	0.52	0.57	0.52	0.58	0.56	0.58	0.52	0.58	0.51	0.56	0.62	0.52	0.58	0.53	0.57	0.55	0.60	
D9	0.50	0.57	0.51	0.58	0.52	0.57	0.50	0.58	0.51	0.58	0.59	0.54	0.59	0.52	0.59	0.59	0.60	
D10	0.52	0.58	0.52	0.57	0.52	0.58	0.52	0.57	0.53	0.52	0.60	0.52	0.57	0.51	0.58	0.51	0.59	
D11	0.50	0.55	0.52	0.58	0.50	0.51	0.51	0.53	0.57	0.51	0.57	0.50	0.59	0.51	0.56	0.53	0.61	
D12	0.52	0.56	0.52	0.57	0.52	0.57	0.52	0.54	0.53	0.50	0.57	0.50	0.59	0.52	0.56	0.56	0.60	
D13	0.52	0.60	0.53	0.58	0.52	0.58	0.52	0.57	0.51	0.53	0.65	0.53	0.62	0.50	0.61	0.51	0.62	
D14	0.53	0.55	0.52	0.56	0.52	0.58	0.56	0.58	0.51	0.54	0.62	0.55	0.61	0.55	0.60	0.59	0.59	
D15	0.52	0.58	0.57	0.58	0.53	0.57	0.56	0.58	0.53	0.57	0.61	0.56	0.59	0.55	0.56	0.55	0.65	
D16	0.48	0.52	0.52	0.58	0.52	0.55	0.48	0.54	0.55	0.61	0.59	0.46	0.51	0.51	0.55	0.50	0.59	
D17	0.51	0.58	0.47	0.52	0.53	0.57	0.51	0.57	0.47	0.53	0.62	0.56	0.58	0.56	0.59	0.57	0.61	
D18	0.47	0.5	0.47	0.53	0.45	0.52	0.54	0.58	0.53	0.58	0.62	0.57	0.61	0.52	0.61	0.56	0.63	
D19	0.48	0.51	0.51	0.60	0.56	0.61	0.51	0.6	0.47	0.53	0.6	0.49	0.54	0.45	0.51	0.54	0.61	
D20	0.48	0.53	0.45	0.55	0.58	0.58	0.57	0.61	0.51	0.55	0.62	0.514	0.61	0.45	0.52	0.52	0.59	
D21	0.52	0.57	0.42	0.51	0.46	0.52	0.46	0.51	0.51	0.58	0.62	0.46	0.59	0.41	0.50	0.41	0.55	
D22	0.50	0.56	0.51	0.59	0.49	0.56	0.54	0.59	0.41	0.51	0.58	0.46	0.52	0.50	0.56	0.51	0.61	
D23	0.53	0.58	0.55	0.59	0.50	0.57	0.52	0.58	0.53	0.48	0.55	0.54	0.59	0.52	0.56	0.56	0.60	
D24	0.48	0.52	0.47	0.53	0.50	0.55	0.46	0.54	0.46	0.50	0.61	0.41	0.50	0.52	0.59	0.51	0.59	
D25	0.52	0.53	0.47	0.52	0.51	0.55	0.51	0.58	0.51	0.58	0.61	0.51	0.56	0.52	0.59	0.46	0.55	
D26	0.41	0.51	0.42	0.54	0.41	0.58	0.54	0.57	0.53	0.55	0.63	0.56	0.60	0.52	0.56	0.56	0.62	
D27	0.47	0.54	0.55	0.55	0.51	0.54	0.52	0.58	0.47	0.55	0.59	0.40	0.55	0.41	0.56	0.55	0.63	
D28	0.47	0.58	0.52	0.60	0.50	0.58	0.46	0.58	0.51	0.59	0.61	0.51	0.61	0.52	0.58	0.52	0.59	
D29	0.53	0.57	0.53	0.58	0.42	0.55	0.45	0.52	0.45	0.54	0.56	0.46	0.55	0.52	0.59	0.51	0.61	
D30	0.47	0.51	0.47	0.58	0.52	0.55	0.47	0.53	0.52	0.54	0.61	0.49	0.55	0.51	0.55	0.56	0.60	

Table S9: Accuracy measured by using t -test and ULR analysis.

ID	GD		GDM		GDA		NM		LM		DNN		BTE		MVE		NDTF	
	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF
D1	63.4	67.9	58	64.6	57.6	66.4	63	67	67.4	69.9	63	68.6	61.6	66.9	60.2	69.3	64.6	69.6
D2	63.2	69.4	59.3	64.0	58	63.9	56	62.61	63	69.9	59.8	62.3	62	66.7	59.6	61.3	63.6	69.8
D3	64.2	69.6	58.9	61.2	61.2	66.3	63	66.6	62.2	66.6	59.9	64.2	56.8	60.6	62.2	66.7	60.4	66.3
D4	63.6	66.9	56.8	60.9	62.2	66.7	61.2	66.6	60.3	63.4	66.2	69.9	56.6	60.2	61.3	63.6	61.6	67.6
D6	60.2	63.4	52.6	60.2	62.3	66.6	60.3	62.6	61.3	67.6	61.3	69.9	56.6	62.2	60.4	64.6	61.6	66.3
D6	63	69	61	69.9	56	62	56	64	60	64	59.9	65.1	56	59.9	61	64	63	64.8
D7	59	69	63	65.9	61	64	55	60	61	69	60	66	58	61.9	60	63	62	65
D8	59	63	56	60.9	62	69	64	69	63	69	66	69.9	52	66	62	66	66	68.1
D9	64	69.8	58	61.9	60	64	61	64	63	66	62	66	61	66	63	67	66	69.9
D10	56	62	54	61.9	64	69	61	69	52	66	64	69.4	56	66	61	69	62	68.9
D11	66	69.9	56	60.9	61	62.8	56.9	66.2	59.2	62.2	57.9	64.1	58.9	62.2	61.1	68.1	62.1	69.1
D12	66.2	69	58.1	62.3	58.1	66.1	53.2	64.1	56.2	66.1	59.1	66.1	58.1	60	62	66	57.6	67.9
D13	63.8	69.1	61.1	68.2	56.9	66.1	56	66.1	56.2	66.1	59.1	67.1	56.9	63.1	60.2	66	61.1	62.3
D14	60.6	66.8	59.9	62.2	59.3	68.4	60.4	68.8	61.8	67.9	58.6	69.2	56.4	67.8	54.3	63.3	52.8	64.9
D15	61.2	67.3	67.2	69.2	61.8	63.9	59.6	66.9	62.9	66.9	62.8	67.8	66.9	69.3	64.9	68.9	66.9	69.9
D16	58.2	69.3	56.1	60.3	61.2	66.8	57.1	61.6	60.9	66.9	61.7	63.9	56.8	60.8	61.2	65.9	61.2	66.4
D17	59.4	68.9	56.3	63.9	60.3	64.2	60.9	66.8	59.9	66.9	61.8	67.9	56.8	64.8	58.3	63.3	59.7	67.8
D18	56.2	62.3	56.8	62.9	58.8	66.8	61	68.1	60.8	67.9	61.8	67.3	62.8	68.2	63	68.8	63.1	69.8
D19	58.9	68.9	61.2	68.9	63.2	69.3	58.9	67.3	62	68.3	63	68.9	59.8	65.8	62	68.1	63.1	69.9
D20	59.2	64.1	60.2	66.6	61.9	68.1	58.8	66.2	63.1	69.3	58.9	69.9	63	67.2	63	69.8	63.8	69.3
D21	61.2	67.2	58.9	68.9	62	67.2	58.9	63.1	62.1	69.8	63	69.2	66.9	69.1	58.8	68.1	59.2	68.2
D22	58.1	62.2	59.2	69.2	63.3	69.2	57.3	64.2	63.1	66.9	61.2	67.1	60.8	68.1	62.2	67.6	62	69.9
D23	59.1	66.2	58.6	69.1	61	68.2	58.6	69.1	59.8	66.8	59.2	67.1	58.9	66.2	58.9	66.8	59.8	69.8
D24	64.2	68.7	60.2	69.9	61	66.9	60.7	69.1	56.9	66.7	61.9	69.3	59.6	66.1	62	68.1	61	68.2
D25	59.0	69	58.9	66.1	59.6	63.9	58.9	68.2	60.8	69.2	62	69.8	61	68.8	62	68.7	62	69.6
D26	58.9	62.8	58.6	66.2	60	68.7	62	69.1	62	68.9	61	69.8	61	67.8	62	69.8	61	69.7
D27	58.0	69.2	57.8	68.2	60	66.9	60	66.8	60	66.9	62	67.6	60	69.1	63	68.9	61.8	69.6
D28	64	69	61	69.8	61	67.1	60	68.6	62	68.2	63	69.7	66	69	63	69.6	62	68.6
D29	58.9	62.6	58.9	62.2	58.9	66.4	60.4	66.6	62.6	69.6	61	66.1	59.6	62.6	61.9	68.9	61.8	69.9
D30	63	69.8	62.2	69.2	61	68	60	66	62	66	63	69.1	63	68	62	66.3	61.9	69.0

Table S10: F-Measure measured by using t -test and ULR analysis.

ID	GD		GDM		GDA		NM		LM		DNN		BTE		MVE		NDTF	
	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF
D1	0.60	0.67	0.61	0.68	0.6	0.67	0.60	0.68	0.6	0.71	0.60	0.66	0.61	0.67	0.60	0.68	0.61	0.67
D2	0.62	0.67	0.61	0.67	0.62	0.66	0.61	0.66	0.6	0.71	0.61	0.67	0.61	0.69	0.60	0.68	0.61	0.69
D3	0.60	0.68	0.61	0.68	0.61	0.67	0.6	0.67	0.61	0.68	0.61	0.70	0.62	0.69	0.61	0.69	0.61	0.68
D4	0.62	0.67	0.64	0.68	0.63	0.67	0.6	0.68	0.61	0.67	0.6	0.66	0.60	0.68	0.60	0.69	0.61	0.70
D5	0.61	0.68	0.6	0.66	0.6	0.66	0.61	0.68	0.61	0.66	0.6	0.69	0.61	0.69	0.63	0.66	0.66	0.71
D6	0.61	0.65	0.6	0.66	0.63	0.68	0.6	0.67	0.6	0.68	0.67	0.73	0.67	0.69	0.62	0.68	0.66	0.70
D7	0.60	0.67	0.67	0.69	0.6	0.67	0.6	0.66	0.6	0.67	0.61	0.68	0.60	0.68	0.61	0.68	0.60	0.68
D8	0.62	0.67	0.62	0.68	0.65	0.68	0.62	0.68	0.61	0.67	0.66	0.72	0.62	0.68	0.63	0.67	0.66	0.70
D9	0.6	0.67	0.61	0.68	0.6	0.67	0.6	0.68	0.61	0.68	0.62	0.69	0.64	0.69	0.62	0.69	0.63	0.70
D10	0.62	0.68	0.6	0.67	0.62	0.68	0.6	0.67	0.61	0.68	0.62	0.70	0.62	0.67	0.61	0.68	0.61	0.69
D11	0.6	0.66	0.62	0.66	0.6	0.68	0.61	0.63	0.6	0.67	0.61	0.68	0.61	0.69	0.61	0.67	0.63	0.71
D12	0.6	0.66	0.62	0.67	0.6	0.67	0.61	0.65	0.61	0.68	0.60	0.67	0.61	0.69	0.62	0.67	0.67	0.70
D13	0.62	0.70	0.61	0.68	0.60	0.68	0.60	0.67	0.61	0.66	0.62	0.76	0.63	0.72	0.60	0.71	0.61	0.72
D14	0.61	0.66	0.6	0.65	0.62	0.68	0.65	0.68	0.61	0.65	0.65	0.72	0.66	0.71	0.66	0.70	0.69	0.69
D15	0.62	0.68	0.66	0.68	0.61	0.68	0.67	0.68	0.63	0.66	0.62	0.70	0.67	0.69	0.66	0.67	0.66	0.76
D16	0.60	0.67	0.62	0.68	0.60	0.66	0.60	0.65	0.66	0.71	0.61	0.69	0.61	0.69	0.61	0.66	0.60	0.69
D17	0.61	0.68	0.61	0.67	0.61	0.67	0.61	0.67	0.61	0.65	0.60	0.72	0.62	0.68	0.61	0.69	0.67	0.71
D18	0.61	0.68	0.61	0.67	0.62	0.68	0.62	0.68	0.67	0.68	0.62	0.70	0.67	0.71	0.62	0.71	0.67	0.73
D19	0.60	0.68	0.61	0.70	0.66	0.7	0.61	0.7	0.65	0.61	0.61	0.7	0.68	0.67	0.66	0.69	0.66	0.71
D20	0.61	0.66	0.63	0.68	0.65	0.68	0.64	0.7	0.62	0.66	0.65	0.72	0.616	0.71	0.66	0.71	0.62	0.69
D21	0.62	0.67	0.62	0.63	0.62	0.66	0.6	0.67	0.61	0.69	0.63	0.72	0.671	0.69	0.61	0.68	0.61	0.66
D22	0.61	0.65	0.6	0.66	0.6	0.66	0.65	0.68	0.6	0.62	0.60	0.69	0.61	0.68	0.60	0.67	0.61	0.71
D23	0.63	0.68	0.66	0.7	0.62	0.67	0.6	0.67	0.63	0.67	0.69	0.67	0.66	0.69	0.62	0.67	0.67	0.70
D24	0.62	0.65	0.62	0.66	0.62	0.65	0.6	0.66	0.65	0.69	0.60	0.71	0.61	0.69	0.62	0.69	0.61	0.69
D25	0.62	0.65	0.62	0.67	0.61	0.66	0.63	0.66	0.61	0.69	0.62	0.71	0.61	0.67	0.62	0.69	0.67	0.70
D26	0.61	0.67	0.6	0.65	0.61	0.67	0.62	0.66	0.61	0.66	0.68	0.73	0.67	0.70	0.62	0.67	0.67	0.72
D27	0.60	0.65	0.66	0.69	0.62	0.65	0.60	0.68	0.65	0.66	0.60	0.69	0.60	0.66	0.61	0.67	0.66	0.73
D28	0.60	0.68	0.62	0.7	0.62	0.68	0.65	0.67	0.6	0.68	0.60	0.71	0.61	0.70	0.62	0.68	0.62	0.69
D29	0.60	0.67	0.65	0.7	0.60	0.65	0.65	0.67	0.67	0.68	0.60	0.67	0.60	0.66	0.62	0.69	0.61	0.71
D30	0.62	0.65	0.61	0.68	0.6	0.66	0.62	0.65	0.6	0.65	0.63	0.73	0.62	0.68	0.61	0.68	0.62	0.70

Table S11: Accuracy measured by using Multivariate linear regression stepwise forward selection and Cross correlation analysis.

ID	GD		GDM		GDA		NM		LM		DNN		BTE		MVE		NDTF	
	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF
D1	62.4	67.9	59.9	63.6	59.6	62.4	63.9	67.9	67.4	69.2	63	68.6	61.6	66.9	63.2	69.3	64.6	69.6
D2	63.2	69.4	59.3	64.0	58	63.9	56	62.61	63	69.9	59.8	63.3	62	66.7	59.6	61.3	63.6	69.8
D3	64.2	69.6	58.9	61.2	61.2	66.3	63	66.6	62.2	66.6	66.6	65.2	56.8	60.6	62.2	66.7	60.4	66.3
D4	63.6	66.9	56.8	60.9	62.2	66.7	61.2	66.6	60.3	63.4	66.2	69.9	56.6	60.2	61.3	63.6	61.6	67.9
D6	60.2	63.4	52.6	60.2	62.3	66.6	56.6	62.6	61.3	67.6	61.3	69.9	56.6	62.2	60.4	64.6	61.6	67.3
D6	63	69	61	69.9	56	62	56	64	60	64	59.9	66.1	56	59.9	61	64	63	64.8
D7	59	69	63	66.9	61	64	55	60	61	69	60	66	58	61.9	60	63	62	65
D8	59	63	56	60.9	62	69	64	69	63	69	66	69.1	52	66	62	66	66	68.1
D9	64	69.8	58	61.9	60	64	61	64	63	66	62	66	61	66	63	67	66	69.2
D10	56	62	54	61.9	64	69	61	69	52	66	64	69.4	56	66	61	69	62	68.9
D11	66	69.9	56	60.9	61	62.8	56.9	66.2	59.2	62.2	57.9	64.1	58.9	62.2	61.1	68.1	62.1	69.8
D12	66.2	69	58.1	62.3	58.1	66.1	53.2	64.1	56.2	66.1	59.1	66.1	58.1	60	62	66	57.6	67.2
D13	63.8	69.1	61.1	68.2	56.9	66.1	56	66.1	56.2	66.1	59.1	67.9	56.9	63.1	60.2	66	61.1	62.3
D14	60.6	66.8	59.9	62.2	59.3	68.4	60.4	68.8	61.8	67.9	58.6	69.4	56.4	67.8	54.3	63.3	52.8	64.9
D15	61.2	67.3	67.2	69.2	61.8	63.9	59.6	66.9	62.9	66.9	62.8	67.8	66.9	69.3	64.9	68.9	66.9	69.3
D16	58.2	69.3	56.1	60.3	61.2	66.8	57.1	61.6	60.9	68.9	61.7	63.9	56.8	60.8	61.2	65.9	61.2	66.4
D17	59.6	68.9	56.3	63.9	60.3	64.2	60.9	66.8	59.9	66.9	61.8	67.9	56.8	64.8	58.3	63.3	59.7	67.8
D18	56.9	62.3	56.8	62.9	58.8	66.8	61	68.1	60.8	67.9	61.8	67.3	62.8	68.2	63	68.8	63.1	69.8
D19	58.9	68.9	61.2	68.9	63.2	69.3	58.9	67.3	62	68.3	63	68.9	59.8	65.8	62	68.1	63.1	69.2
D20	59.9	64.1	60.2	66.6	61.9	68.1	58.8	66.2	63.1	69.3	58.9	69.8	63	67.2	63	69.8	63.8	69.3
D21	61.7	67.2	58.9	68.9	62	67.2	58.9	63.1	62.1	69.8	63	69.8	66.9	69.1	58.8	68.1	59.2	68.2
D22	58.9	62.2	59.2	69.2	63.3	69.2	57.3	64.2	63.1	66.9	61.2	67.1	60.8	68.1	62.2	67.6	62	69.8
D23	61.2	66.2	58.6	69.1	61	68.2	58.6	69.1	59.8	66.8	59.2	67.1	58.9	66.2	58.9	66.8	59.8	69.2
D24	63.8	68.7	60.2	69.9	61	66.9	60.7	69.1	56.9	66.7	61.9	69.3	59.6	66.1	62	68.1	61	68.2
D25	61.2	69	58.9	66.1	59.6	63.9	58.9	68.2	60.8	69.2	62	69.9	61	68.8	62	68.7	62	69.6
D26	59.9	62.8	58.6	66.2	60	68.7	62	69.1	62	68.9	61	69.3	61	67.8	62	69.1	61	69.1
D27	58.8	69.2	57.8	68.2	60	66.9	60	66.8	60	66.9	62	67.6	60	69.1	63	68.9	61.8	69.9
D28	64.8	69	61	69.2	61	67.1	60	68.6	62	68.2	63	69.9	66	69	63	69.6	62	68.6
D29	58.8	62.6	58.9	62.2	58.9	66.4	60.4	66.6	62.6	69.6	61	66.1	59.6	62.6	61.9	67.9	61.8	69.8
D30	63.2	69.8	62.2	69.2	61	68	60	66	62	66	63	69.8	63	68	62	66.3	61.9	69.0

Table S12: F-Measure measured by using Multivariate linear regression stepwise forward selection and Cross correlation analysis.

ID	GD		GDM		GDA		NM		LM		DNN		MVE		NDTF	
	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF
D1	0.63	0.67	0.61	0.67	0.62	0.67	0.62	0.67	0.60	0.73	0.60	0.66	0.61	0.67	0.60	0.68
D2	0.65	0.67	0.61	0.67	0.60	0.65	0.62	0.66	0.60	0.73	0.61	0.67	0.61	0.69	0.60	0.68
D3	0.64	0.68	0.63	0.67	0.63	0.66	0.62	0.67	0.62	0.67	0.71	0.62	0.69	0.61	0.69	0.68
D4	0.61	0.66	0.62	0.66	0.6	0.66	0.62	0.67	0.62	0.67	0.6	0.65	0.60	0.68	0.60	0.72
D5	0.62	0.66	0.61	0.65	0.6	0.66	0.61	0.67	0.61	0.67	0.61	0.69	0.61	0.69	0.63	0.70
D6	0.63	0.65	0.62	0.66	0.62	0.67	0.62	0.66	0.62	0.68	0.72	0.67	0.69	0.62	0.68	0.70
D7	0.61	0.67	0.66	0.71	0.62	0.67	0.62	0.68	0.61	0.68	0.61	0.68	0.60	0.68	0.61	0.68
D8	0.61	0.67	0.62	0.68	0.65	0.68	0.62	0.68	0.63	0.67	0.71	0.62	0.68	0.63	0.67	0.70
D9	0.61	0.67	0.61	0.68	0.62	0.67	0.60	0.67	0.61	0.68	0.62	0.69	0.64	0.69	0.62	0.71
D10	0.6	0.68	0.6	0.67	0.62	0.68	0.62	0.67	0.61	0.68	0.71	0.62	0.67	0.61	0.68	0.69
D11	0.61	0.66	0.62	0.66	0.62	0.68	0.61	0.63	0.60	0.67	0.68	0.61	0.69	0.61	0.67	0.70
D12	0.62	0.66	0.60	0.67	0.60	0.67	0.61	0.65	0.61	0.68	0.61	0.68	0.61	0.69	0.62	0.71
D13	0.62	0.71	0.61	0.68	0.62	0.68	0.62	0.67	0.61	0.66	0.75	0.63	0.72	0.60	0.71	0.61
D14	0.63	0.66	0.62	0.68	0.62	0.68	0.67	0.68	0.61	0.66	0.72	0.66	0.71	0.66	0.70	0.69
D15	0.62	0.67	0.66	0.67	0.63	0.66	0.65	0.67	0.63	0.64	0.62	0.71	0.67	0.69	0.66	0.76
D16	0.63	0.67	0.62	0.68	0.62	0.66	0.60	0.65	0.66	0.72	0.61	0.69	0.61	0.69	0.61	0.69
D17	0.61	0.68	0.61	0.67	0.61	0.67	0.60	0.67	0.61	0.65	0.71	0.62	0.68	0.61	0.69	0.70
D18	0.61	0.68	0.61	0.67	0.6	0.68	0.6	0.68	0.67	0.68	0.62	0.72	0.67	0.71	0.67	0.72
D19	0.6	0.68	0.61	0.7	0.66	0.7	0.61	0.7	0.65	0.61	0.7	0.7	0.61	0.68	0.66	0.71
D20	0.62	0.67	0.60	0.68	0.60	0.68	0.62	0.7	0.61	0.66	0.72	0.616	0.71	0.66	0.71	0.62
D21	0.62	0.67	0.6	0.61	0.6	0.66	0.6	0.67	0.61	0.68	0.72	0.671	0.69	0.61	0.68	0.66
D22	0.61	0.66	0.62	0.68	0.62	0.66	0.67	0.68	0.60	0.62	0.60	0.69	0.61	0.68	0.60	0.71
D23	0.61	0.68	0.66	0.69	0.6	0.67	0.6	0.68	0.61	0.66	0.67	0.67	0.66	0.62	0.67	0.70
D24	0.61	0.66	0.6	0.67	0.6	0.66	0.6	0.66	0.65	0.68	0.61	0.71	0.61	0.69	0.62	0.69
D25	0.60	0.67	0.62	0.67	0.61	0.68	0.61	0.66	0.61	0.68	0.71	0.61	0.67	0.62	0.69	0.70
D26	0.61	0.68	0.62	0.67	0.61	0.68	0.64	0.67	0.61	0.68	0.73	0.67	0.70	0.62	0.67	0.72
D27	0.61	0.67	0.66	0.69	0.61	0.65	0.62	0.68	0.65	0.66	0.62	0.68	0.60	0.66	0.61	0.73
D28	0.61	0.68	0.62	0.7	0.62	0.68	0.65	0.68	0.61	0.69	0.71	0.61	0.70	0.62	0.68	0.69
D29	0.62	0.67	0.67	0.7	0.62	0.65	0.65	0.67	0.65	0.68	0.61	0.67	0.66	0.62	0.69	0.71
D30	0.61	0.65	0.61	0.68	0.6	0.66	0.61	0.65	0.6	0.65	0.73	0.62	0.68	0.61	0.68	0.70

Table S13: Accuracy measured by using Cross correlation analysis, t -test and ULR analysis.

ID	GD		GDM		GDA		NM		LM		DNN		BTE		MVE		NDTF	
	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF
D1	72.4	77.9	69.9	73.7	69.7	72.4	73.9	77.9	77.4	79.2	73	78.7	71.7	77.9	73.2	79.3	74.7	79.1
D2	73.2	79.4	69.3	74.0	68	73.9	67	72.71	73	79.9	69.8	79.9	72	77.7	69.7	71.3	73.7	79.8
D3	74.2	79.7	68.9	71.2	71.2	77.3	73	77.7	72.2	77.7	69.9	78.2	67.8	70.7	72.2	77.7	70.4	77.3
D4	73.7	77.9	67.8	70.9	72.2	77.7	71.2	77.7	70.3	73.4	77.2	79.9	67.7	70.2	71.3	73.7	71.7	78.9
D7	70.2	73.4	62.7	70.2	72.3	77.7	62.7	72.7	71.3	77.7	71.3	78.9	67.7	72.2	70.4	74.7	71.7	79.3
D7	73	79	71	79.2	67	72	67	74	70	74	69.9	79.9	67	69.9	71	74	73	74.8
D7	69	79	73	77.9	71	74	66	70	71	79	70	77	68	71.9	70	73	72	76
D8	69	73	67	70.9	72	79	74	79	77	79	77	79.1	62	77	72	77	77	78.1
D9	74	79.8	68	71.9	70	74	71	74	73	77	72	77	71	77	73	77	77	79.2
D10	67	72	64	71.9	74	79	71	79	62	77	74	79.4	67	77	71	79	72	78.9
D11	77	79.9	67	70.9	71	72.8	67.9	77.2	69.2	72.2	67.9	74.1	68.9	72.2	71.1	78.1	72.1	79.8
D12	77.2	79	68.1	72.3	68.1	77.1	63.2	74.1	67.2	77.1	69.1	77.1	68.1	70	72	77	67.7	77.2
D13	73.8	79.1	71.1	78.2	67.9	77.1	67	77.1	67.2	77.1	69.1	77.9	67.9	73.1	70.2	77	71.1	72.3
D14	70.7	77.8	69.9	72.2	69.3	78.4	70.4	78.8	71.8	77.9	68.7	79.4	67.4	77.8	64.3	73.3	62.8	74.9
D15	71.2	77.3	77.2	79.2	71.8	73.9	69.7	77.9	72.9	77.9	72.8	77.8	77.9	79.3	74.9	78.9	77.9	79.3
D16	68.2	79.3	67.1	70.3	71.2	77.8	67.1	71.7	70.9	78.9	71.7	73.9	67.8	70.8	71.2	76.9	71.2	77.4
D17	69.7	78.9	67.3	73.9	70.3	74.2	70.9	77.8	69.9	77.9	71.8	77.9	67.8	74.8	68.3	73.3	69.7	77.8
D18	67.9	72.3	67.8	72.9	68.8	77.8	71	78.1	70.8	77.9	71.8	77.3	72.8	78.2	73	78.8	73.1	79.8
D19	68.9	78.9	71.2	78.9	73.2	79.3	68.9	77.3	72	78.3	73	78.9	69.8	76.8	72	78.1	73.1	79.2
D20	69.9	74.1	70.2	77.7	71.9	78.1	68.8	77.2	73.1	79.3	68.9	79.8	73	77.2	73	79.8	73.8	79.3
D21	71.7	77.2	68.9	78.9	72	77.2	68.9	73.1	72.1	79.8	73	79.8	77.9	79.1	68.8	78.1	69.2	78.2
D22	68.9	72.2	69.2	79.2	73.3	79.2	67.3	74.2	73.1	77.9	71.2	77.1	70.8	78.1	72.2	77.7	72	79.8
D23	71.2	77.2	68.7	79.1	71	78.2	68.7	79.1	69.8	77.8	69.2	77.1	68.9	77.2	68.9	77.8	69.8	79.2
D24	73.8	78.7	70.2	79.9	71	77.9	70.7	79.1	67.9	77.7	71.9	79.3	69.7	77.1	72	78.1	71	78.2
D25	71.2	79	68.9	77.1	69.7	73.9	68.9	78.2	70.8	79.2	72	79.9	71	78.8	72	78.7	72	79.7
D26	69.9	72.8	68.7	77.2	70	78.7	72	79.1	72	78.9	71	79.3	71	77.8	72	79.1	71	79.1
D27	68.8	79.2	67.8	78.2	70	77.9	70	77.8	70	77.9	72	77.7	70	79.1	73	78.9	71.8	79.9
D28	74.8	79	71	79.2	71	77.1	70	78.7	72	78.2	73	79.9	77	79	73	79.7	72	78.7
D29	68.8	72.7	68.9	72.2	68.9	77.4	70.4	77.7	72.7	79.7	71	77.1	69.7	72.7	71.9	77.9	71.8	79.8
D30	73.2	79.8	72.2	79.2	71	78	70	77	72	77	73	79.8	73	78	72	77.3	71.9	79.0

Table S14: F-Measure measured by using Cross correlation analysis, t -test and ULR analysis.

ID	GD		GDM		GDA		NM		LM		DNN		BTE		MVE		NDTF	
	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF	EF	SF
D1	0.73	0.77	0.71	0.78	0.70	0.78	0.72	0.78	0.7	0.83	0.70	0.77	0.71	0.78	0.70	0.78	0.71	0.78
D2	0.73	0.77	0.71	0.77	0.7	0.77	0.71	0.77	0.7	0.83	0.71	0.78	0.71	0.79	0.70	0.78	0.71	0.79
D3	0.72	0.78	0.71	0.78	0.71	0.77	0.7	0.77	0.71	0.79	0.71	0.81	0.72	0.79	0.71	0.79	0.71	0.78
D4	0.71	0.77	0.72	0.78	0.71	0.77	0.7	0.78	0.71	0.77	0.7	0.78	0.70	0.78	0.70	0.79	0.71	0.82
D5	0.72	0.78	0.71	0.77	0.7	0.77	0.73	0.78	0.71	0.78	0.71	0.79	0.71	0.79	0.73	0.77	0.77	0.80
D6	0.71	0.76	0.7	0.77	0.73	0.78	0.70	0.77	0.70	0.79	0.78	0.82	0.79	0.72	0.78	0.77	0.77	0.80
D7	0.71	0.77	0.77	0.81	0.7	0.77	0.7	0.77	0.72	0.77	0.71	0.78	0.70	0.78	0.71	0.78	0.70	0.78
D8	0.71	0.77	0.72	0.78	0.76	0.78	0.72	0.78	0.71	0.76	0.77	0.81	0.72	0.78	0.73	0.78	0.77	0.80
D9	0.71	0.77	0.71	0.78	0.72	0.77	0.7	0.78	0.71	0.79	0.73	0.79	0.74	0.79	0.72	0.79	0.73	0.81
D10	0.72	0.78	0.7	0.77	0.72	0.78	0.7	0.77	0.71	0.78	0.72	0.81	0.72	0.78	0.71	0.78	0.71	0.79
D11	0.71	0.77	0.70	0.77	0.70	0.78	0.71	0.73	0.70	0.78	0.72	0.78	0.71	0.79	0.71	0.78	0.73	0.80
D12	0.72	0.77	0.70	0.77	0.70	0.77	0.71	0.76	0.71	0.78	0.71	0.78	0.71	0.79	0.72	0.78	0.78	0.81
D13	0.70	0.81	0.71	0.78	0.7	0.78	0.72	0.77	0.71	0.77	0.72	0.85	0.73	0.82	0.70	0.81	0.71	0.82
D14	0.71	0.77	0.72	0.77	0.74	0.78	0.76	0.78	0.71	0.76	0.76	0.82	0.77	0.81	0.77	0.80	0.79	0.79
D15	0.72	0.78	0.77	0.78	0.71	0.77	0.76	0.78	0.71	0.78	0.71	0.81	0.78	0.79	0.77	0.78	0.77	0.87
D16	0.73	0.77	0.72	0.78	0.70	0.77	0.72	0.76	0.77	0.82	0.71	0.79	0.71	0.79	0.71	0.77	0.70	0.79
D17	0.71	0.78	0.71	0.77	0.71	0.77	0.71	0.77	0.71	0.77	0.71	0.81	0.72	0.78	0.71	0.79	0.78	0.80
D18	0.71	0.78	0.73	0.77	0.72	0.78	0.72	0.78	0.76	0.78	0.73	0.82	0.78	0.81	0.72	0.81	0.78	0.82
D19	0.70	0.78	0.71	0.80	0.77	0.78	0.71	0.8	0.76	0.71	0.72	0.8	0.71	0.78	0.77	0.79	0.77	0.81
D20	0.72	0.77	0.70	0.78	0.70	0.78	0.74	0.8	0.72	0.77	0.7	0.82	0.717	0.81	0.77	0.81	0.72	0.79
D21	0.72	0.77	0.7	0.7	0.7	0.76	0.7	0.7	0.7	0.79	0.78	0.82	0.781	0.79	0.71	0.78	0.71	0.77
D22	0.71	0.77	0.7	0.78	0.7	0.77	0.76	0.78	0.72	0.72	0.70	0.79	0.71	0.78	0.70	0.78	0.71	0.81
D23	0.71	0.78	0.77	0.8	0.7	0.77	0.77	0.77	0.76	0.77	0.78	0.78	0.77	0.79	0.72	0.78	0.78	0.80
D24	0.72	0.76	0.7	0.7	0.7	0.76	0.73	0.77	0.76	0.78	0.70	0.81	0.71	0.79	0.72	0.79	0.71	0.79
D25	0.7	0.75	0.7	0.75	0.71	0.77	0.7	0.76	0.71	0.78	0.71	0.81	0.71	0.78	0.72	0.79	0.78	0.80
D26	0.71	0.73	0.7	0.7	0.7	0.75	0.72	0.77	0.7	0.76	0.77	0.83	0.78	0.80	0.72	0.78	0.78	0.82
D27	0.71	0.75	0.77	0.70	0.7	0.76	0.72	0.77	0.77	0.78	0.71	0.79	0.70	0.77	0.71	0.78	0.77	0.83
D28	0.71	0.7	0.7	0.8	0.7	0.77	0.76	0.78	0.70	0.79	0.71	0.81	0.71	0.80	0.72	0.78	0.72	0.79
D29	0.71	0.76	0.75	0.8	0.7	0.75	0.76	0.77	0.78	0.79	0.71	0.78	0.70	0.77	0.72	0.79	0.71	0.81
D30	0.71	0.76	0.71	0.75	0.70	0.75	0.7	0.7	0.7	0.77	0.74	0.83	0.72	0.78	0.71	0.78	0.72	0.80