TABLE IV

Performance metrics of all machine learning algorithms for scenarios 1, 2 and 3. *DT - Decision Tree, RF - Random Forest, SVM - Support Vector Machine, NN - Neural Networks, ASE - AutoSklearn Ensemble.

Classifier	Scenario	Accuracy (%)	Precision (%)	Recall (%)	F-Measure (%)	Fitting (ms)	Scoring (ms)
DT	1	63	63	63	63	82	4
DT	2	65	64	65	64	238	4
DT	3	69	69	69	68	253	4
RF	1	71	70	71	70	1,506	92
RF	2	75	75	75	74	2,368	88
RF	3	79	78	79	78	2,486	84
SVM	1	67	66	67	66	2,443	385
SVM	2	72	71	72	71	1,468	443
SVM	3	77	77	77	76	1,381	439
NN	1	67	66	67	65	95,492	27
NN	2	72	71	72	70	103,909	28
NN	3	77	76	77	75	79,801	22
ASE	1	86	86	86	86	160,940	792
ASE	2	94	94	94	94	277,529	1,565
ASE	3	96	96	96	96	236,905	1,315

TABLE V

Performance metrics of all machine learning algorithms for scenarios 4, 5 and 6. *DT - Decision Tree, RF - Random Forest, SVM - Support Vector Machine, NN - Neural Networks, ASE - AutoSklearn Ensemble.

Classifier	Scenario	Accuracy	Precision	Recall	F-Measure	Fitting	Scoring
Ciassillei	Scenario	(%)	(%)	(%)	(%)	Fitting (ms) 36 64 73 808 1,231 1,611 2,740 1,686 1,337 78,638 81,214 58,115 221,589	(ms)
DT	4	52	52	52	51	36	5
DT	5	61	61	61	61	64	3
DT	6	66	66	66	65	73	4
RF	4	60	59	60	58	808	100
RF	5	70	70	70	69	1,231	91
RF	6	74	74	74	73	1,611	88
SVM	4	53	54	53	51	2,740	360
SVM	5	62	61	62	61	1,686	377
SVM	6	69	69	69	68	1,337	308
NN	4	55	54	55	53	78,638	24
NN	5	64	64	64	63	81,214	24
NN	6	71	71	71	70	58,115	17
ASE	4	71	71	71	71	221,589	490
ASE	5	84	84	84	84	179,840	710
ASE	6	89	89	89	89	149,542	601

TABLE VI

Performance metrics of all machine learning algorithms for scenarios 7, 8 and 9. *DT - Decision Tree, RF - Random Forest, SVM - Support Vector Machine, NN - Neural Networks, ASE - AutoSklearn Ensemble.

Classifier	Scenario	Accuracy	Precision	Recall	F-Measure	Fitting	Scoring
		(%)	(%)	(%)	(%)	(ms)	(ms)
DT	7	65	65	65	64	124	3
DT	8	65	65	65	64	347	3
DT	9	71	71	71	70	357	3
RF	7	73	72	73	72	1,750	83
RF	8	75	74	75	73	2,603	82
RF	9	80	80	80	79	2,719	80
SVM	7	59	60	59	57	3,995	626
SVM	8	66	66	66	64	4,811	1,015
SVM	9	71	72	71	70	5,264	1,076
NN	7	68	67	68	67	86,258	24
NN	8	69	67	69	67	98,461	26
NN	9	74	73	74	72	71,040	18
ASE	7	89	89	89	89	142,765	205
ASE	8	95	95	95	95	217,956	230
ASE	9	97	97	97	97	144,981	100

TABLE VII

Performance metrics of all machine learning algorithms for scenarios 10, 11 and 12. *DT - Decision Tree, RF - Random Forest, SVM - Support Vector Machine, NN - Neural Networks, ASE - AutoSklearn Ensemble.

Classifier	Scenario	Accuracy (%)	Precision (%)	Recall (%)	F-Measure (%)	Fitting (ms)	Scoring (ms)
DT	10	47	47	47	47	29	4
DT	11	57	57	57	57	65	4
DT	12	63	62	63	61	80	4
RF	10	53	53	53	52	823	102
RF	11	67	67	67	66	1,276	96
RF	12	72	72	72	71	1,683	89
SVM	10	53	55	53	52	3,239	363
SVM	11	59	59	59	58	1,933	386
SVM	12	66	66	66	65	1,520	318
NN	10	54	55	54	53	80,017	25
NN	11	61	61	61	60	80,680	24
NN	12	69	69	69	68	57,074	17
ASE	10	61	61	61	60	268,661	667
ASE	11	82	82	82	82	146,096	493
ASE	12	87	87	87	87	157,042	620

TABLE VIII

Performance metrics of all machine learning algorithms for scenarios 4, 5 and 6. *DT - Decision Tree, RF - Random Forest, SVM - Support Vector Machine, NN - Neural Networks, ASE - AutoSklearn Ensemble.

Classifier	Scenario	Accuracy (%)	Precision (%)	Recall (%)	F-Measure (%)	Fitting (ms)	Scoring (ms)
DT	4	52	52	52	51	36	5
DT	5	61	61	61	61	64	3
DT	6	66	66	66	65	73	4
RF	4	60	59	60	58	808	100
RF	5	70	70	70	69	1,231	91
RF	6	74	74	74	73	1,611	88
SVM	4	53	54	53	51	2,740	360
SVM	5	62	61	62	61	1,686	377
SVM	6	69	69	69	68	1,337	308
NN	4	55	54	55	53	78,638	24
NN	5	64	64	64	63	81,214	24
NN	6	71	71	71	70	58,115	17
ASE	4	71	71	71	71	221,589	490
ASE	5	84	84	84	84	179,840	710
ASE	6	89	89	89	89	149,542	601

TABLE IX

PERFORMANCE METRICS OF ALL MACHINE LEARNING ALGORITHMS FOR SCENARIOS 7, 8 AND 9. *DT - DECISION TREE, RF - RANDOM FOREST, SVM - SUPPORT VECTOR MACHINE, NN - NEURAL NETWORKS, ASE - AUTOSKLEARN ENSEMBLE.

Classifier	Scenario	Accuracy	Precision	Recall	F-Measure	Fitting	Scoring
		(%)	(%)	(%)	(%)	(ms)	(ms)
DT	7	65	65	65	64	124	3
DT	8	65	65	65	64	347	3
DT	9	71	71	71	70	357	3
RF	7	73	72	73	72	1,750	83
RF	8	75	74	75	73	2,603	82
RF	9	80	80	80	79	2,719	80
SVM	7	59	60	59	57	3,995	626
SVM	8	66	66	66	64	4,811	1,015
SVM	9	71	72	71	70	5,264	1,076
NN	7	68	67	68	67	86,258	24
NN	8	69	67	69	67	98,461	26
NN	9	74	73	74	72	71,040	18
ASE	7	89	89	89	89	142,765	205
ASE	8	95	95	95	95	217,956	230
ASE	9	97	97	97	97	144,981	100

TABLE X

Performance metrics of all machine learning algorithms for scenarios 10, 11 and 12. *DT - Decision Tree, RF - Random Forest, SVM - Support Vector Machine, NN - Neural Networks, ASE - AutoSklearn Ensemble.

Classifier	Scenario	Accuracy (%)	Precision (%)	Recall (%)	F-Measure (%)	Fitting (ms)	Scoring (ms)
DT	10	47	47	47	47	29	4
DT	11	57	57	57	57	65	4
DT	12	63	62	63	61	80	4
RF	10	53	53	53	52	823	102
RF	11	67	67	67	66	1,276	96
RF	12	72	72	72	71	1,683	89
SVM	10	53	55	53	52	3,239	363
SVM	11	59	59	59	58	1,933	386
SVM	12	66	66	66	65	1,520	318
NN	10	54	55	54	53	80,017	25
NN	11	61	61	61	60	80,680	24
NN	12	69	69	69	68	57,074	17
ASE	10	61	61	61	60	268,661	667
ASE	11	82	82	82	82	146,096	493
ASE	12	87	87	87	87	157,042	620