1 Results tables

1.1 Performance metrics of the male and female noisy datasets in different noisy environments

	Accuracy		Precision		Recall		F1-score	
Noise category	M	F	M	F	M	F	M	F
Nature	0.81	0.84	0.84	0.86	0.92	0.94	0.88	0.89
Domestic	0.84	0.85	0.87	0.87	0.92	0.94	0.9	0.9
Street	0.85	0.85	0.87	0.87	0.93	0.94	0.9	0.9
Public	0.76	0.74	0.77	0.74	0.98	0.99	0.86	0.84
Transportation	0.84	0.83	0.86	0.84	0.94	0.94	0.9	0.89
Office	0.86	0.86	0.89	0.89	0.91	0.93	0.9	0.91
Total	0.82	0.83	0.85	0.84	0.93	0.95	0.89	0.89

Table 1: Model: silero, confidence threshold: 0.1

	Accuracy		Precision		Recall		F1-score	
Noise category	M	F	M	F	M	F	M	F
Nature	0.85	0.87	0.9	0.9	0.89	0.92	0.9	0.91
Domestic	0.84	0.86	0.88	0.88	0.91	0.94	0.9	0.9
Street	0.88	0.88	0.94	0.91	0.91	0.92	0.92	0.92
Public	0.79	0.77	0.8	0.77	0.96	0.97	0.87	0.86
Transportation	0.87	0.88	0.92	0.92	0.9	0.92	0.91	0.92
Office	0.86	0.87	0.9	0.89	0.92	0.93	0.91	0.91
Total	0.85	0.85	0.88	0.87	0.92	0.93	0.9	0.9

Table 2: Model: silero, confidence threshold: 0.2

	Accuracy		Precision		Recall		F1-score	
Noise category	M	F	M	F	M	F	M	F
Nature	0.86	0.89	0.93	0.93	0.88	0.91	0.9	0.92
Domestic	0.87	0.88	0.92	0.91	0.9	0.92	0.91	0.92
Street	0.89	0.91	0.96	0.96	0.88	0.91	0.92	0.93
Public	0.81	0.81	0.84	0.81	0.93	0.96	0.88	0.88
Transportation	0.89	0.9	0.96	0.95	0.89	0.91	0.92	0.93
Office	0.85	0.87	0.9	0.9	0.91	0.93	0.9	0.91
Total	0.86	0.87	0.91	0.9	0.9	0.92	0.91	0.91

Table 3: Model: silero, confidence threshold: 0.3

	Accuracy		Precision		Recall		F1-score	
Noise category	M	F	M	F	M	F	M	F
Nature	0.88	0.9	0.95	0.95	0.87	0.9	0.91	0.93
Domestic	0.87	0.89	0.95	0.93	0.88	0.92	0.91	0.92
Street	0.89	0.91	0.97	0.97	0.88	0.91	0.92	0.94
Public	0.84	0.83	0.86	0.84	0.93	0.95	0.9	0.89
Transportation	0.88	0.91	0.96	0.96	0.88	0.91	0.92	0.94
Office	0.86	0.87	0.91	0.9	0.9	0.92	0.9	0.91
Total	0.87	0.88	0.93	0.92	0.89	0.92	0.91	0.92

Table 4: Model: silero, confidence threshold: 0.4

	Accuracy		Precision		Recall		F1-score	
Noise category	M	F	M	F	M	F	M	F
Nature	0.88	0.91	0.97	0.96	0.87	0.9	0.92	0.93
Domestic	0.89	0.9	0.96	0.95	0.89	0.91	0.92	0.93
Street	0.88	0.91	0.98	0.98	0.86	0.9	0.92	0.94
Public	0.85	0.84	0.89	0.86	0.91	0.94	0.9	0.9
Transportation	0.89	0.92	0.98	0.98	0.87	0.91	0.92	0.94
Office	0.86	0.88	0.91	0.91	0.9	0.92	0.9	0.92
Total	0.87	0.89	0.94	0.93	0.88	0.91	0.91	0.92

Table 5: Model: silero, confidence threshold: 0.5

	Accuracy		Precision		Recall		F1-score	
Noise category	M	F	M	F	M	F	M	F
Nature	0.88	0.91	0.98	0.97	0.85	0.9	0.91	0.94
Domestic	0.89	0.91	0.97	0.97	0.88	0.9	0.92	0.94
Street	0.89	0.91	0.99	0.98	0.86	0.9	0.92	0.94
Public	0.85	0.86	0.91	0.89	0.89	0.92	0.9	0.9
Transportation	0.89	0.92	0.98	0.98	0.87	0.9	0.92	0.94
Office	0.85	0.88	0.91	0.92	0.88	0.92	0.9	0.92
Total	0.87	0.9	0.95	0.95	0.87	0.91	0.91	0.93

Table 6: Model: silero, confidence threshold: 0.6

	Accuracy		Precision		Recall		F1-score	
Noise category	M	F	M	F	M	F	M	F
Nature	0.87	0.91	0.99	0.99	0.84	0.9	0.91	0.94
Domestic	0.88	0.91	0.98	0.98	0.85	0.9	0.91	0.94
Street	0.88	0.91	0.99	0.99	0.84	0.89	0.91	0.94
Public	0.85	0.86	0.94	0.91	0.86	0.9	0.9	0.91
Transportation	0.88	0.92	0.99	0.99	0.85	0.9	0.91	0.94
Office	0.86	0.88	0.93	0.92	0.88	0.91	0.9	0.92
Total	0.87	0.9	0.97	0.96	0.85	0.9	0.91	0.93

Table 7: Model: silero, confidence threshold: 0.7

	Accuracy		Precision		Recall		F1-score	
Noise category	M	F	M	F	M	F	M	F
Nature	0.88	0.91	0.99	0.99	0.84	0.89	0.91	0.94
Domestic	0.87	0.91	0.99	0.99	0.83	0.89	0.9	0.94
Street	0.87	0.91	0.99	1.0	0.83	0.88	0.91	0.93
Public	0.84	0.86	0.96	0.93	0.82	0.87	0.89	0.9
Transportation	0.88	0.91	0.99	0.99	0.84	0.89	0.91	0.94
Office	0.85	0.88	0.93	0.93	0.86	0.91	0.89	0.92
Total	0.86	0.9	0.97	0.97	0.84	0.89	0.9	0.93

Table 8: Model: silero, confidence threshold: 0.8

	Accuracy		Precision		Recall		F1-score	
Noise category	M	F	M	F	M	F	M	F
Nature	0.86	0.9	0.99	1.0	0.82	0.87	0.9	0.93
Domestic	0.86	0.91	1.0	1.0	0.81	0.87	0.9	0.93
Street	0.87	0.9	1.0	1.0	0.83	0.86	0.9	0.92
Public	0.8	0.83	0.97	0.96	0.75	0.8	0.85	0.88
Transportation	0.87	0.91	0.99	1.0	0.83	0.88	0.91	0.93
Office	0.85	0.88	0.94	0.94	0.86	0.9	0.9	0.92
Total	0.85	0.89	0.98	0.98	0.82	0.86	0.89	0.92

Table 9: Model: silero, confidence threshold: 0.9

	Accuracy		Precision		Recall		F1-score	
Noise category	M	F	M	F	M	F	M	F
Nature	0.82	0.82	0.82	0.82	0.97	0.96	0.89	0.89
Domestic	0.84	0.82	0.84	0.82	0.97	0.97	0.9	0.89
Street	0.78	0.77	0.77	0.77	0.99	0.98	0.87	0.86
Public	0.74	0.73	0.74	0.73	1.0	1.0	0.85	0.84
Transportation	0.82	0.82	0.81	0.82	0.98	0.98	0.89	0.89
Office	0.83	0.82	0.83	0.82	0.97	0.97	0.9	0.89
Total	0.8	0.8	0.8	0.79	0.98	0.98	0.88	0.88

Table 10: Model: webrtc-vad, confidence threshold: 0

	Accuracy		Precision		Recall		F1-score	
Noise category	M	F	M	F	M	F	M	F
Nature	0.83	0.84	0.83	0.85	0.96	0.96	0.89	0.9
Domestic	0.84	0.83	0.84	0.83	0.97	0.97	0.9	0.89
Street	0.8	0.8	0.8	0.79	0.98	0.98	0.88	0.87
Public	0.74	0.73	0.74	0.73	1.0	1.0	0.85	0.84
Transportation	0.83	0.84	0.83	0.83	0.96	0.97	0.89	0.9
Office	0.84	0.83	0.84	0.83	0.96	0.96	0.9	0.89
Total	0.81	0.81	0.81	0.81	0.97	0.97	0.89	0.88

Table 11: Model: webrtc-vad, confidence threshold: 1

	Accuracy		Precision		Recall		F1-score	
Noise category	M	F	M	F	M	F	M	F
Nature	0.83	0.86	0.84	0.87	0.94	0.94	0.89	0.91
Domestic	0.84	0.84	0.85	0.85	0.94	0.96	0.9	0.9
Street	0.8	0.81	0.8	0.81	0.98	0.97	0.88	0.88
Public	0.74	0.73	0.74	0.73	1.0	1.0	0.85	0.84
Transportation	0.85	0.86	0.86	0.87	0.95	0.96	0.9	0.91
Office	0.84	0.84	0.86	0.84	0.94	0.95	0.9	0.89
Total	0.82	0.82	0.82	0.82	0.96	0.96	0.89	0.89

Table 12: Model: webrtc-vad, confidence threshold: 2

	Accuracy		Precision		Recall		F1-score	
Noise category	M	F	M	F	M	F	M	F
Nature	0.79	0.68	0.96	0.99	0.76	0.57	0.84	0.72
Domestic	0.82	0.74	0.97	0.99	0.79	0.65	0.87	0.79
Street	0.75	0.46	0.95	0.97	0.7	0.26	0.81	0.41
Public	0.7	0.36	0.92	0.98	0.65	0.12	0.77	0.21
Transportation	0.84	0.8	0.97	1.0	0.8	0.73	0.88	0.84
Office	0.81	0.79	0.94	0.97	0.79	0.73	0.86	0.84
Total	0.79	0.65	0.95	0.98	0.75	0.53	0.84	0.69

Table 13: Model: webrtc-vad, confidence threshold: 3

1.2 Performance metrics of the "Total" category of noise for different SNR levels

	Accuracy					Precision				
Threshold	20	10	0	-10	-20	20	10	0	-10	-20
0.1	0.9	0.9	0.85	0.79	0.7	0.97	0.96	0.88	0.81	0.79
0.2	0.91	0.9	0.87	0.81	0.68	0.99	0.97	0.91	0.85	0.83
0.3	0.91	0.9	0.88	0.82	0.65	0.99	0.98	0.93	0.87	0.85
0.4	0.91	0.9	0.88	0.82	0.62	1.0	0.99	0.94	0.89	0.86
0.5	0.91	0.9	0.88	0.82	0.61	1.0	0.99	0.95	0.9	0.87
0.6	0.91	0.9	0.89	0.81	0.58	1.0	0.99	0.96	0.91	0.89
0.7	0.9	0.9	0.89	0.8	0.55	1.0	0.99	0.96	0.92	0.9
0.8	0.9	0.9	0.89	0.78	0.52	1.0	0.99	0.97	0.93	0.91
0.9	0.9	0.9	0.88	0.76	0.47	1.0	1.0	0.98	0.95	0.93

	Recall					F1-Score				
Threshold	20	10	0	-10	-20	20	10	0	-10	-20
0.1	0.89	0.9	0.93	0.95	0.82	0.93	0.93	0.9	0.87	0.8
0.2	0.89	0.89	0.91	0.92	0.72	0.93	0.93	0.91	0.88	0.77
0.3	0.88	0.89	0.91	0.9	0.66	0.94	0.93	0.92	0.88	0.74
0.4	0.88	0.89	0.91	0.88	0.6	0.93	0.93	0.92	0.88	0.71
0.5	0.88	0.88	0.9	0.85	0.56	0.93	0.93	0.92	0.87	0.68
0.6	0.88	0.88	0.89	0.83	0.5	0.93	0.93	0.92	0.87	0.64
0.7	0.87	0.88	0.88	0.8	0.45	0.93	0.93	0.92	0.86	0.6
0.8	0.87	0.87	0.87	0.77	0.4	0.93	0.93	0.92	0.84	0.55
0.9	0.87	0.87	0.86	0.72	0.32	0.93	0.93	0.91	0.82	0.48

Table 14: Performance metrics of the "Total" category for the model: silero

	Accuracy					Precision				
Threshold	20	10	0	-10	-20	20	10	0	-10	-20
0	0.88	0.85	0.81	0.79	0.75	0.89	0.86	0.81	0.79	0.78
1	0.89	0.87	0.82	0.79	0.74	0.91	0.89	0.83	0.8	0.79
2	0.9	0.88	0.83	0.8	0.72	0.93	0.91	0.84	0.81	0.79
3	0.89	0.72	0.52	0.37	0.28	1.0	1.0	1.0	0.99	0.96

	Recall					F1-Score				
Threshold	20	10	0	-10	-20	20	10	0	-10	-20
0	0.96	0.96	0.97	0.97	0.93	0.92	0.91	0.88	0.87	0.85
1	0.95	0.95	0.96	0.96	0.9	0.93	0.92	0.89	0.88	0.84
2	0.94	0.93	0.95	0.95	0.86	0.93	0.92	0.89	0.88	0.82
3	0.86	0.63	0.37	0.16	0.05	0.92	0.78	0.54	0.28	0.09

Table 15: Performance metrics of the "Total" category for the model: webrtc-vad