TABLE A1: Intake gesture detection performance results by setting. Each setting defines the intake gesture, window length, and train/test split by the original author. In each setting, our proposed method and the baseline method are compared in pairs for all three datasets, with values representing window-based metrics and values inside the parentheses representing duration-based evaluation metrics. Model size unit, KB; inference time unit, msec; energy consumption unit, mJ.

Intake Gesture Method	Setting	Dataset	Precision	Recall	Accuracy	F1 Score	Size	Inference	Energy
Proposed (5 sec @ 100 Hz)	[15]	In-lab FIC	.886 (.832)	.816 (.812)	.839 (.796)	.871 (.822)	310	60.17	16.09
CNN-LSTM [15] (5 sec @ 100 Hz	[15]	In-lab FIC	.914 (.845)	.899 (.836)	.902 (.815)	.906 (.840)	2645	897.32	36.01
Proposed (5 sec @ 15 Hz)	[15]	Clemson	.874 (.852)	.798 (.695)	.859 (.810)	.834 (.766)	54	21.25	8.65
CNN-LSTM [15] (5 sec @ 15 Hz	[15]	Clemson	.759 (.712)	.845 (.795)	.810 (.790)	.800 (.751)	1259	456.32	27.21
Proposed (5 sec @ 64 Hz)	[15]	OREBA	.816 (.755)	.712 (.721)	.765 (.701)	.760 (.737)	214	33.42	15.72
CNN-LSTM [15] (5 sec @ 64 Hz)	[15]	OREBA	.815 (.794)	.745 (.701)	.808 (.766)	.778 (.745)	1754	556.12	29.51
Proposed (8 sec @ 100 Hz)	[40]	In-lab FIC	.845 (.801)	.798 (.767)	.802 (.765)	.821 (.784)	486	65.32	34.23
ResNet-10 CNN-LSTM [40] (8 sec @ 100 Hz)	[40]	In-lab FIC	.854 (.823)	.821 (.812)	.817 (.804)	.837 (.817)	4920	912.25	65.25
Proposed (8 sec @ 15 Hz)	[40]	Clemson	.874 (.852)	.798 (.695)	.859 (.810)	.834 (.766)	88	33.12	10.72
ResNet-10 CNN-LSTM [40] (8 sec @ 15 Hz)	[40]	Clemson	.812 (.759)	.806 (.801)	.802 (.761)	.809 (.779)	2812	674.43	38.01
Proposed (8 sec @ 64 Hz)	[40]	OREBA	.832 (.787)	.755 (.712)	.809 (.720)	.792 (.748)	321	40.21	21.32
ResNet-10 CNN-LSTM [40] (8 sec @ 64 Hz)	[40]	OREBA	.895 (.812)	.816 (.739)	.867 (.741)	.853 (.774)	3124	796.21	46.94
Proposed (8 sec @ 100 Hz)	[13]	In-lab FIC	.845 (.801)	.798 (.767)	.802 (.765)	.821 (.784)	486	65.32	34.23
Naive Bayes [13] (8 sec @ 100 Hz)	[13]	In-lab FIC	.699 (.614)	.584 (.572)	.641 (.593)	.636 (.592)	6	7.36	4.91
Thresholding [39] (T1=10, T2=10, T3=2, T4=8, 100 Hz)	[13]	In-lab FIC	.252 (.234)	.866 (.861)	.311 (.265)	.390 (.368)	2	6.01	3.54
Proposed (8 sec @ 15 Hz)	[13]	Clemson	.874 (.852)	.798 (.695)	.859 (.810)	.834 (.766)	88	33.12	10.72
Naive Bayes [13] (8 sec @ 15 Hz)	[13]	Clemson	.595 (.512)	.526 (.501)	.497 (.506)	.558 (.523)	3	5.106	3.12
Thresholding [39] (T1=15, T2=-15, T3=1, T4=4, 15 Hz)	[13]	Clemson	.256 (.198)	.845 (.820)	.412 (.376)	.393 (.319)	2	6.13	1.99
Proposed (8 sec @ 64 Hz)	[13]	OREBA	.832 (.787)	.755 (.712)	.809 (.720)	.792 (.748)	321	40.21	21.32
Naive Bayes [13] (8 sec @ 64 Hz)	[13]	OREBA	.644 (.602)	.685 (.554)	.609 (.572)	.664 (.577)	4	5.76	2.22
Thresholding [39] (T1=25, T2=-25, T3=2, T4=2, 64 Hz)	[13]	OREBA	.168 (.152)	.832 (.789)	.453 (.366)	.280 (.255)	2	5.63	4.99
Proposed (6 sec @ 100 Hz)	[12]	In-lab FIC	.852 (.751)	.795 (.785)	.801 (.711)	.823 (.768)	416	78.23	19.53
Random forest [12] (6 sec @ 100 Hz)	[12]	In-lab FIC	.775 (.719)	.723 (.687)	.721 (.651)	.748 (.703)	325	31.25	16.88
RBF-SVM [12] (6 sec @ 100 Hz)	[12]	In-lab FIC	.723 (.712)	.698 (.667)	.691 (.601)	.710 (.689)	92	24.21	11.23
3-NN [12] (6 sec @ 100 Hz)	[12]	In-lab FIC	.765 (.724)	.623 (.597)	.709 (.654)	.687 (.658)	1852	385.22	23.12
Proposed (6 sec @ 15 Hz)	[12]	Clemson	.886 (.854)	.771 (.701)	.756 (.702)	.789 (.770)	65	28.55	11.65
Random forest [12] (6 sec @ 100 Hz)	[12]	Clemson	.711 (.658)	.645 (.623)	.702 (.633)	.676 (.640)	281	26.23	13.90
RBF-SVM [12] (6 sec @ 15 Hz)	[12]	Clemson	.725 (.716)	.685 (.624)	.635 (.574)	.704 (.667)	83	19.05	10.18
3-NN [12] (6 sec @ 15 Hz)	[12]	Clemson	.744 (.654)	.654 (.688)	.703 (.658)	.691 (.671)	1423	352.19	18.24
Proposed (6 sec @ 64 Hz)	[12]	OREBA	.723 (.712)	.714 (.743)	.701 (.698)	.718 (.727)	244	38.55	19.21
Random forest [12] (6 sec @ 64 Hz)	[12]	OREBA	.796 (.755)	.712 (.698)	.709 (.645)	.752 (.725)	285	28.58	14.13
RBF-SVM [12] (6 sec @ 64 Hz)	[12]	OREBA	.752 (.713)	.625 (.622)	.602 (.585)	.683 (.664)	88	22.12	13.95
3-NN [12] (6 sec @ 64 Hz)	[12]	OREBA	.776 (.732)	.626 (.643)	.695 (.658)	.693 (.685)	1598	386.23	19.01