TABLE I
PERFORMANCE COMPARISON OF BOTH THE INDIVIDUAL HEADSET MICROPHONE (IHM) MIXED-DOWN STREAM AND THE SINGLE DISTANT MICROPHONE (SDM) STREAM ON THE MULTI-SPEAKER MEETINGS IN THE AMI CORPUS ALONG WITH THE BIDIRECTIONAL LONG SHORT TERM MEMORY NETWORK (BLSTM) APPROACH (BASELINE-2) USING A COLLAR OF 250 MS.

Meeting	Proposed Pitch System										Baseline-1 Pitch System										BLSTM Baseline System									
	IHM Mixed-Down Stream					SDM Stream					IHM Mixed-Down Stream					SDM Stream					IHM Mixed-Down Stream					SDM Stream				
	HIT	MISS	MH	MSE	FA	HIT	MISS	MH	MSE	FA	HIT	MISS	MH	MSE	FA	HIT	MISS	MH	MSE	FA	HIT	MISS	MH	MSE	FA	HIT	MISS	MH	MSE	FA
EN2002a	78.7%	21.3%	52.1%	0.014	64.9%	80.0%	20.0%	53.9%	0.014	64.7%	84.0%	21.3%	52.1%	0.014	71.4%	75.2%	24.9%	59.8%	0.014	74.3%	83.6%	16.4%	38.1%	0.008	47.2%	67.4%	32.6%	67.4%	0.011	55.6%
EN2002b	83.0%	17.0%	58.4%	0.014	68.5%	80.2%	19.9%	55.2%	0.015	70.4%	87.3%	17.0%	58.4%	0.014	76.3%	81.4%	18.6%	67.1%	0.014	77.5%	81.5%	18.5%	36.0%	0.008	53.6%	69.0%	31.0%	69.0%	0.011	56.3%
EN2002c	82.1%	17.9%	57.8%	0.014	71.5%	80.0%	20.0%	54.0%	0.015	73.8%	87.0%	17.9%	57.8%	0.014	81.2%	81.0%	19.0%	65.3%	0.015	82.6%	81.5%	18.6%	35.3%	0.007	52.2%	70.3%	29.7%	70.3%	0.012	61.2%
EN2002d	78.3%	21.7%	54.4%	0.014	66.6%	80.8%	19.1%	54.5%	0.015	66.9%	82.9%	21.7%	54.4%	0.014	74.4%	74.8%	25.2%	60.2%	0.015	76.7%	84.8%	15.2%	40.0%	0.008	51.1%	71.9%	28.1%	71.9%	0.012	55.3%
ES2004a	72.8%	27.2%	48.9%	0.015	73.6%	75.0%	25.0%	53.0%	0.015	76.1%	81.7%	27.2%	48.9%	0.015	81.5%	73.8%	26.2%	60.4%	0.014	83.8%	60.7%	39.3%	22.5%	0.010	54.0%	51.3%	48.7%	51.3%	0.015	65.2%
ES2004b	70.8%	29.2%	42.1%	0.015	81.0%	75.8%	24.1%	51.7%	0.014	81.3%	84.3%	29.2%	42.1%	0.015	88.0%	78.9%	21.1%	62.4%	0.016	90.0%	61.8%	38.2%	19.3%	0.010	54.8%	58.5%	41.5%	58.5%	0.014	73.6%
ES2004c	72.9%	27.1%	43.2%	0.016	78.2%	77.2%	22.9%	49.4%	0.015	79.5%	86.9%	27.1%	43.2%	0.016	87.2%	79.1%	20.9%	63.5%	0.015	89.1%	63.4%	36.6%	24.3%	0.008	45.0%	66.8%	33.2%	66.8%	0.012	72.9%
ES2004d	75.2%	24.8%	49.1%	0.014	71.0%	76.2%	23.8%	50.6%	0.013	74.7%	84.5%	24.8%	49.1%	0.014	82.3%	76.8%	23.2%	61.9%	0.014	83.9%	59.4%	40.6%	20.0%	0.010	48.4%	66.1%	33.9%	66.1%	0.012	61.5%
ES2014a	61.6%	38.4%	33.7%	0.015	85.3%	61.6%	38.4%	33.7%	0.015	85.3%	64.7%	38.4%	33.7%	0.015	90.6%	58.6%	41.4%	43.0%	0.015	91.3%	50.8%	49.2%	21.4%	0.014	61.9%	46.9%	53.1%	15.7%	0.012	81.8%
ES2014b	67.3%	32.7%	42.3%	0.015	83.4%	67.3%	32.7%	42.3%	0.015	83.4%	77.6%	32.7%	42.3%	0.015	87.1%	77.3%	22.7%	60.1%	0.015	87.7%	43.8%	56.2%	14.9%	0.010	61.7%	47.4%	52.6%	15.3%	0.013	80.0%
ES2014c	67.3%	32.7%	38.7%	0.016	82.0%	67.3%	32.7%	38.7%	0.016	82.0%	77.0%	32.7%	38.7%	0.016	86.0%	82.2%	17.8%	68.2%	0.012	84.5%	45.3%	54.7%	15.0%	0.012	61.0%	51.6%	48.4%	17.5%	0.013	79.5%
ES2014d	69.2%	30.8%	43.6%	0.015	77.1%	69.2%	30.8%	43.6%	0.015	77.1%	71.8%	30.8%	43.6%	0.015	84.7%	74.3%	25.7%	55.2%	0.016	84.3%	52.8%	47.2%	17.6%	0.013	61.4%	49.6%	50.4%	12.9%	0.013	76.5%
IS1009a	72.7%	27.3%	44.9%	0.014	77.0%	73.5%	26.5%	49.6%	0.014	77.0%	79.3%	27.3%	44.9%	0.014	83.5%	80.0%	20.0%	64.1%	0.016	83.7%	72.8%	27.1%	31.3%	0.008	52.1%	66.5%	33.5%	66.5%	0.008	64.7%
IS1009b	69.2%	30.8%	41.0%	0.016	79.2%	72.2%	27.8%	44.0%	0.016	80.7%	84.9%	30.8%	41.0%	0.016	86.8%	83.2%	16.8%	69.9%	0.014	88.2%	73.6%	26.4%	29.2%	0.008	47.3%	67.2%	32.8%	67.2%	0.010	67.3%
IS1009c	74.5%	25.5%	43.5%	0.014	84.5%	70.3%	29.7%	40.6%	0.015	86.3%	72.7%	25.5%	43.5%	0.014	91.2%	74.7%	25.3%	60.2%	0.014	92.0%	65.3%	34.7%	22.4%	0.008	63.3%	68.8%	31.2%	68.8%	0.009	76.2%
IS1009d	72.3%	27.7%	45.0%	0.014	75.8%	76.2%	23.8%	48.7%	0.015	76.0%	83.5%	27.7%	45.0%	0.014	84.3%	82.9%	17.1%	70.7%	0.014	84.5%	64.5%	35.5%	23.0%	0.010	49.3%	67.0%	33.0%	67.0%	0.010	63.4%
TS3003a	68.5%	31.5%	39.5%	0.015	85.2%	70.7%	29.3%	43.0%	0.015	88.4%	69.8%	31.5%	39.5%	0.015	93.3%	59.9%	40.1%	43.3%	0.018	93.4%	43.6%	56.4%	11.1%	0.011	71.9%	45.2%	54.8%	45.2%	0.014	81.6%
TS3003b	76.0%	24.0%	43.2%	0.015	83.8%	80.7%	19.3%	53.5%	0.016	85.8%	77.7%	24.0%	43.2%	0.015	92.8%	76.2%	23.8%	60.7%	0.019	92.2%	51.8%	48.2%	23.2%	0.017	51.7%	50.3%	49.7%	50.3%	0.021	79.7%
TS3003c	74.2%	25.8%	42.8%	0.015	86.4%	76.8%	23.2%	49.5%	0.015	89.0%	76.8%	25.8%	42.8%	0.015	93.3%	77.8%	22.2%	63.8%	0.018	93.1%	51.6%	48.4%	14.9%	0.018	68.9%	58.7%	41.3%	58.7%	0.021	81.1%
TS3003d	75.0%	25.0%	43.2%	0.016	74.7%	80.8%	19.2%	57.9%	0.014	75.1%	80.5%	25.0%	43.2%	0.016	85.7%	78.6%	21.4%	63.3%	0.016	85.7%	64.7%	35.3%	24.8%	0.015	48.3%	59.9%	40.1%	59.9%	0.015	61.2%
TS3007a	68.2%	31.9%	39.4%	0.015	77.5%	68.2%	31.9%	39.4%	0.015	77.5%	85.6%	31.9%	39.4%	0.015	84.2%	82.3%	17.7%	70.5%	0.014	84.2%	61.9%	38.1%	22.8%	0.011	49.6%	52.2%	47.8%	16.8%	0.009	75.5%
TS3007b	80.1%	19.9%	57.9%	0.014	84.9%	80.1%	19.9%	57.9%	0.014	84.9%	92.6%	19.9%	57.9%	0.014	87.8%	90.1%	9.9%	78.6%	0.012	87.0%	71.2%	28.8%	22.5%	0.007	41.9%	62.4%	37.6%	14.2%	0.009	80.5%
TS3007c	74.0%	26.0%	50.0%	0.014	76.6%	74.0%	26.0%	50.0%	0.014	76.6%	91.6%	26.0%	50.0%	0.014	82.5%	88.7%	11.3%	77.9%	0.012	82.8%	77.4%	22.6%	33.3%	0.009	51.4%	67.8%	32.2%	23.8%	0.009	73.1%
TS3007d	79.4%	20.6%	57.9%	0.014	68.2%	79.4%	20.6%	57.9%	0.014	68.2%	94.6%	20.6%	57.9%	0.014	74.1%	90.8%	9.2%	79.3%	0.012	75.1%	81.3%	18.6%	34.4%	0.009	46.6%	71.2%	28.8%	22.4%	0.010	67.8%
Mean	73.5%	26.5%	46.4%	0.015	77.4%	74.7%	25.3%	48.9%	0.015	78.4%	81.6%	18.3%	68.2%	0.009	84.6%	78.3%	21.7%	63.7%	0.015	85.3%	64.5%	35.5%	24.9%	0.010	53.9%	60.6%	39.4%	47.6%	0.012	70.5%