

MIREX Evaluation Results Poster 1

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Audio Beat Tracking (Mazurka)

Rank	Participant	F-Measure
1	Davies, Robertson & Plumbley (3)	0.678
2	Peeters (2) (VE)	0.547
3	Peeters (1) (VE)	0.542
4	Davies, Robertson & Plumbley (2)	0.484
5	Peeters (4) (CE)	0.454
6	Davies, Robertson & Plumbley (4)	0.453
7	Lee	0.449
8	Peeter (3)(CE)	0.447
9	Oliveira, Gouyon & Martins (R)	0.321
10	Oliveira, Gouyon & Martins (SC)	0.307
11	Davies, Robertson & Plumbley (1)	0.279

Audio Beat Tracking (McKinney)

Rank	Participant	F-Measure
1	Peeters (1) (VE)	0.548
2	Peeters (3) (CE)	0.546
3	Peeters (4) (CE)	0.545
4	Peeters (2) (VE)	0.537
5	Lee	0.500
6	Davies, Robertson & Plumbley (4)	0.480
7	Davies, Robertson & Plumbley (3)	0.470
8	Oliveira, Gouyon & Martins (R)	0.415
9	Oliveira, Gouyon & Martins (SC)	0.397
10	Davies, Robertson & Plumbley (2)	0.354
11	Davies, Robertson & Plumbley (1)	0.246

Special TagATune Evaluation

Rank	Participant	Tagatune Metric
1	AggregateBot	93.00%
2	Mandel	70.10%
3	Marsyas	68.60%
4	Manzagol	67.50%
5	Zhi	60.90%
6	LabX	26.80%

Audio Chord Detection (Train-Test)

Rank	Participant	Overlap
1	Weller, Ellis & Jebara (4)	74.20%
2	Weller, Ellis & Jebara (2)	72.30%
2	Weller, Ellis & Jebara (3)	72.30%
3	Weller, Ellis & Jebara (1)	70.40%
4	Reed, Ueda, Siniscalchi, Uchiyama, Sagayama & Lee	70.10%

Audio Chord Detection (No Training)

Rank	Participant	Overlap
1	Mauch & Dixon	71.20%
2	Oudre, Grenier & Fevotte (2)	71.10%
3	Khadkevich & Omologo (2)	70.80%
4	Oudre, Grenier & Fevotte (1)	70.60%
5	Ellis	69.70%
5	Khadkevich & Omologo (1)	69.70%
6	Pauwels, Varewyck & Martens (1)	68.20%
7	Papadopoulos & Peeters	67.30%
8	Pauwels, Varewyck & Martens (2)	65.40%
9	Rocher, Robine, Hanna & Strandh (1)	62.90%
10	Harte	57.60%
11	Rocher, Robine, Hanna & Strandh (2)	54.50%
12	Rocher, Robine, Hanna & Strandh (3)	53.80%

Audio Cover Song Identification (Mazurkas)

Rank	Participant	Precision
1	Serra, Zanin & Andrzejak	0.96
2	Ravuri & Ellis	0.91
3	Ahonen	0.56

Audio Cover Song Identification (Mixed)

Rank	Participant	Precision
1	Serra, Zanin & Andrzejak	0.75
2	Ravuri & Ellis	0.66
3	Ahonen	0.20

Audio Melody Extraction

Rank	Participant	Accuracy
1	Dressler	73.35%
2	Durrieu & Richard (1) (GSMM)	66.86%
3	Durrieu & Richard (2) (SIMM)	66.17%
4	Rao & Rao	65.22%
5	Cancela	62.88%
6	Joo, Jo & Yoo	56.64%
7	Cao & Li (2)	55.19%
8	Tachibana, Ono, Ono & Sagayama	55.08%
9	Wendelboe	55.07%
10	Cao & Li (1)	52.19%
11	Hsu, Jang & Chen (1) (DP)	50.49%
12	Hsu, Jang & Chen (2) (HMM)	49.01%

Audio Music Similarity

Rank	Participants	Fine Score
1	Pohle & Schnitzer (2009)	6.46
2	Pohle & Schnitzer (2007)	5.75
3	Bogdanov, Serrà, Wack & Herrera (hybrid)	5.73
4	Lidy & Rauber	5.47
5	Anonymous	5.39
5	Cao & Li (2)	5.39
6	Tzanetakis	5.34
7	Bogdanov, Serrà, Wack & Herrera (class)	5.14
8	Hübler (1)	5.04
9	Hübler (2)	4.93
10	Fields (mfcc10)	2.59
10	Maillet & Eck (sda)	2.59
11	Cao & Li (1)	2.53
12	Fields (chr12)	2.40
13	Maillet & Eck (mlp)	2.33

Audio Onset Detection

Rank	Participant	F-Measure
1	Röbel (2) (10_hd)	0.796
2	Röbel (1) (7_hd)	0.790
3	Röbel (5) (19_hdc)	0.783
4	Pertusa & Iñesta	0.768
5	Röbel (4) (16_nhd)	0.765
6	Röbel (3) (12_nhd)	0.761
7	Tan, Zhu & Chaisorn (1)	0.744
8	Tan, Zhu & Chaisorn (2)	0.734
9	Tan, Zhu & Chaisorn (3)	0.686
10	Tan, Zhu & Chaisorn (5)	0.682
11	Tan, Zhu & Chaisorn (4)	0.679
12	Tzanetakis	0.595

Multiple Fundamental Frequency (Estimation)

Rank	Participant	Accuracy
1	Yeh & Roebel (2)	0.688
2	Yeh & Roebel (1)	0.646
3	Duan, Han & Pardo (2)	0.569
4	Duan, Han & Pardo (1)	0.548
5	Nakano, Egashira, Ono & Sagayama (2)	0.492
5	Zhang & Liu	0.488
6	Nesi, Pantaleo & Argenti (2)	0.483
7	Nesi, Pantaleo & Argenti (1)	0.437
8	Nakano, Egashira, Ono & Sagayama (1)	0.354
9	Raczynski & Sagayama (2)	0.272
10	Raczynski & Sagayama (1)	0.261
11	Bertin, Vincent & Badeau	0.033

Multiple Fundamental Frequency (Instrument Tracking)

Rank	Participant	F-Measure
1	Duan, Han & Pardo (1)	0.335

Multiple Fundamental Frequency (Note Tracking)

Rank	Participant	F-Measure
1	Nakano, Egashira, Ono & Sagayama (2)	0.319
2	Yeh & Roebel	0.308
3	Nesi, Pantaleo & Argenti (2)	0.227
4	Duan, Han & Pardo (1)	0.222
5	Raczynski & Sagayama (3)	0.159
6	Raczynski & Sagayama (1)	0.158
7	Raczynski & Sagayama (4)	0.150
8	Raczynski & Sagayama (6)	0.149
9	Raczynski & Sagayama (2)	0.148
10	Raczynski & Sagayama (5)	0.144
11	Nesi, Pantaleo & Argenti (1)	0.136
12	Nakano, Egashira, Ono & Sagayama (1)	0.037
13	Bertin, Vincent & Badeau	0.003

Music Structure Segmentation

Rank	Participant	Pairwise F-Measure
1	Mauch, Noland & Dixon	0.600
2	Anonymous (1)	0.582
3	Anonymous (2)	0.577
4	Paulus & Klapuri	0.540
5	Peeters	0.533

Query-by-Singing/Humming (Known-Item)

Rank	Participant	MRR
1	Jang (2)	0.81
2	Hanna, Allali, Ferraro & Robine	0.67
3	Jang (1)	0.66

Query-by-Singing/Humming (Variations)

Rank	Participant	Count
1	Jang (1)	8.48
2	Hanna, Allali, Ferraro & Robine	6.98
3	Jang (2)	6.97

Query-by-Tapping (Audio)

Rank	Participant	MRR
1	Chen & Jang	0.77
2	Hsiao & Liang	0.73
3	Hanna, Allali, Ferraro & Robine	0.66

Query-by-Tapping (Symbolic)

Rank	Participant	MRR
1	Hsiao & Liang	0.74
1	Hanna, Allali, Ferraro & Robine	0.74
2	Chen & Jang	0.72

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