

MIREX 2014 Evaluation Results

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Real-time Audio to Score Alignment

SubID	Participants	Total Precision
CC4	ChunTa Chen, Jyh-Shing Roger Jang	0.9146
RV3	Francisco Jose Rodriguez-Serrano, Pedro Vera-Candeas	0.9098
RV2	Francisco Jose Rodriguez-Serrano, Pedro Vera-Candeas	0.8928
CR1	Oriol Romaní Picas, Julio Jose Carabias-Orti	0.8217

Audio Music Similarity

SubID	Participants	Avg. Fine Score
FFMD1	Peter Foster, György Fazekas, Matthias Mauch, Simon Dixon	38.16
GK1	Aggelos Gkiokas, Vassilis Katsouros, George Carayannis	35.29
GKC2	Aggelos Gkiokas, Vassilis Katsouros, George Carayannis	35.33
GKC3	Aggelos Gkiokas, Vassilis Katsouros, George Carayannis	34.56
PS1	Dominik Schnitzer, Tim Pohle	48.88
SS2	Klaus Seyerlehner, Markus Schedl	49.35
SS4	Klaus Seyerlehner, Markus Schedl	49.01
SS5	Abhinava Srivastava, Mohit Sinha	45.08

Symbolic Music Similarity

SubID	Participants	Avg. Fine Score (0-1)
JU1	Julián Urbano	0.54
JU2	Julián Urbano	0.55
JU3	Julián Urbano	0.51
YO1	Yoshiaki OKUBO	0.37

Audio Tag Classification - Major/Minor

SubID	Participants	Class. F-Measure	Affinity AUC-ROC
SS1	Klaus Seyerlehner, Markus Schedl	0.49	0.89

Audio Tag Classification - Mood

SubID	Participants	Class. F-Measure	Affinity AUC-ROC
SS1	Klaus Seyerlehner, Markus Schedl	0.49	0.87

Multi-F0 Estimation

SubID	Participants	Accuracy
BW1	Emmanouil Benetos, Tillman Weyde	0.66
EF1	Anders Elowsson, Anders Friberg	0.72
KD2	Karin Dressle	0.68
RM1	Recoskie, Richard Mann	0.41
SY1	Li Su, Yi-Hsuan Yang	0.63
SY2	Li Su, Yi-Hsuan Yang	0.64
SY3	Li Su, Yi-Hsuan Yang	0.61

Multi-F0 Note Tracking - Piano Only

SubID	Participants	Avg. F-measure Onset Only	Avg. Overlap
BW2	Emmanouil Benetos, Tillman Weyde	0.56	0.84
BW3	Emmanouil Benetos, Tillman Weyde	0.63	0.84
CB1	Chris Cannam, Emmanouil Benetos	0.66	0.81
CD3	Andrea Cogliati, Zhiyao Duan	0.42	0.73
DT1	Zhiyao Duan, David Temperley	0.32	0.75
DT2	Zhiyao Duan, David Temperley	0.38	0.76
DT3	Zhiyao Duan, David Temperley	0.38	0.76
EF1	Anders Elowsson, Anders Friberg	0.80	0.84
KD2	Karin Dressle	0.68	0.84
RM1	Recoskie, Richard Mann	0.22	0.80
SB5	Sebastian Böck	0.68	0.77
SY4	Li Su, Yi-Hsuan Yang	0.50	0.83

Structural Segmentation - MIREX '09

SubID	Participants	MIREX '09 F-measure	MIREX 10 RWC / Quiero SB@3sec	MIREX 10 RWC / RWC F-measure	Salami F-measure
NB1	Oriol Nieto, Juan P. Bello	0.49	0.56	0.51	0.51
NB2	Oriol Nieto, Juan P. Bello	0.52	0.70	0.56	0.50
NB3	Oriol Nieto, Juan P. Bello	0.47	0.55	0.52	0.50
NJ1	Oriol Nieto, Tristan Jehan	0.48	0.55	0.51	0.50
SUG1	Jan Schlüter, Karen Ullrich, Thomas Grill	0.49	0.64	0.40	0.48
SUG2	Jan Schlüter, Karen Ullrich, Thomas Grill	0.46	0.72	0.37	0.42

Multi-F0 Note Tracking - Mixed Dataset

SubID	Participants	Avg. F-measure Onset Only	Avg. Overlap
BW2	Emmanouil Benetos, Tillman Weyde	0.58	0.88
BW3	Emmanouil Benetos, Tillman Weyde	0.54	0.88
CB1	Chris Cannam, Emmanouil Benetos	0.48	0.86
DT1	Zhiyao Duan, David Temperley	0.39	0.85
DT2	Zhiyao Duan, David Temperley	0.45	0.85
DT3	Zhiyao Duan, David Temperley	0.45	0.85
EF1	Anders Elowsson, Anders Friberg	0.82	0.88
KD2	Karin Dressle	0.66	0.89
RM1	Recoskie, Richard Mann	0.44	0.86
SB5	Sebastian Böck	0.55	0.84
SY4	Li Su, Yi-Hsuan Yang	0.46	0.88

Singing Voice Separation

SubID	Participants	Singing Voice (GNSDR, dB)	Music (GNSDR, dB)
GW1	Guan-Xiang Wang, Po-Kai Yang, Chung-Chien Hsu, Jen-Tzung Chien	2.89	5.25
HKHS1	Po-Sen Huang, Minje Kim, Mark Hasegawa-Johnson, Paris Smaragdis	-1.40	0.35
HKHS2	Po-Sen Huang, Minje Kim, Mark Hasegawa-Johnson, Paris Smaragdis	-1.94	0.52
HKHS3	Po-Sen Huang, Minje Kim, Mark Hasegawa-Johnson, Paris Smaragdis	-2.48	0.14
IY1	Yukara Ikemiya, Katsutoshi Itoyama, Kazuyoshi Yoshii	4.22	7.79
IY2	Yukara Ikemiya, Katsutoshi Itoyama, Kazuyoshi Yoshii	4.48	7.87
JL1	Il-Young Jeong, Kyogu Lee	4.16	5.63
LFR1	Antoine Liutkus, Derry Fitzgerald, Zafar Rafii	0.65	3.09
RNA1	Preeti Rao, Nagesh Nayak, Sharath Adavanne	3.69	7.32
RP1	Zafar Rafii, Bryan Pardo	2.86	5.03
YC1	Frederick Yen, Tai-Shih Chi	-0.82	-3.12

Query By Singing/Humming

SubID	Participants	Hidden Jang (MRR)	Jang (MRR)	ThinkIt (MRR)	IOACAS (MRR)	Subtask2 (Simple Count)
BS1	Bartłomiej Stasiak	0.86	0.91	0.00	0.00	9.65
LW1	Lei Wang	0.93	0.96	0.97		9.69
WHLX1	Minhui Wu, yixin hou, Hailong Liu, Dadong Xie,	0.47	0.43	0.96	0.80	5.78
WHLX2	Minhui Wu, yixin hou, Hailong Liu, Dadong Xie	0.76	0.81	0.94	0.76	9.48
YJ1	Tzu-Chun Yeh, Jyh-Shing, Roger Jang	0.91	0.93	0.88	0.40	8.74

Audio Fingerprinting

SubID	Participants	size of database (MB)	top-1 hit rate (%)
GY1	Antonio de Carvalho Junior, Leonardo Batista	2110	52.28
WW1	Lei Wang, Runtao Wang	2151	90.71
WW2	Lei Wang, Runtao Wang	2079	90.86
WW3	Lei Wang, Runtao Wang	2577	91.87
WW4	Lei Wang, Runtao Wang	2151	90.74
WW5	Lei Wang, Runtao Wang	2072	91.6
WW6	Lei Wang, Runtao Wang	2212	91.78
WW7	Lei Wang, Runtao Wang	2013	91.64
WW8	Lei Wang, Runtao Wang	1513	91.73
WW9	Lei Wang, Runtao Wang	1513	91.74

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Discovery of Repeated Themes & Sections

SubID	Participants	Task Version	R_est	P_est	R_occ	P_occ	Log Runtime
NF1	Oriol Nieto, Morwaread Farbood	Symbolic, Monophonic	0.54	0.50	0.33	0.60	2.68
OL1	Olivier Lartillot	Symbolic, Monophonic	0.56	0.62	0.76	0.88	4.55
VM1	Gissel Velarde, David Meredith	Symbolic, Monophonic	0.80	0.70	0.81	0.49	2.00
VM2	Gissel Velarde, David Meredith	Symbolic, Monophonic	0.63	0.65	0.58	0.60	1.31
NF1'13	Oriol Nieto, Morwaread Farbood	Symbolic, Monophonic	0.42	0.47	0.41	0.59	2.03
DM10'13	David Meredith	Symbolic, Monophonic	0.61	0.52	0.75	0.57	2.21
NF1	Oriol Nieto, Morwaread Farbood	Symbolic, Polyphonic	0.33	0.24	0.03	0.11	2.63
NF2'13	Oriol Nieto, Morwaread Farbood	Symbolic, Polyphonic	0.37	0.49	0.48	0.61	2.46
DM10	David Meredith	Symbolic, Polyphonic	0.56	0.56	0.82	0.53	2.96
NF1	Oriol Nieto, Morwaread Farbood	Audio, Monophonic	0.53	0.59	0.23	0.43	2.70
NF3'13	Oriol Nieto, Morwaread Farbood	Audio, Monophonic	0.38	0.49	0.11	0.41	1.79
NF1	Oriol Nieto, Morwaread Farbood	Audio, Polyphonic	0.28	0.26	0.01	0.04	2.46
NF4'13	Oriol Nieto, Morwaread Farbood	Audio, Polyphonic	0.22	0.28	0.01	0.07	1.56

Audio Downbeat Estimation

SubID	Participants	F-measure					
		ballroom	beatles	carnatic	turkish	cretan	hjdkb
FK3	Florian Krebs	79.2*	58.8	16.9	19.7	53.5	53.5
FK4	Florian Krebs	70.8*	63	19.4	24	51.2	51.2
KSH1	Florian Krebs, Andre Holzapfel, Ajay Srinivasamurthy	19.4	19.4	40	77.5*	85.4*	85.4
DBDR2	Simon Durand, Juan Bello, Bertrand David, Gael Richard	70.5	83.1*	18.4	44.8	43.5	43.5
DBDR3	Simon Durand, Juan Bello, Bertrand David, Gael Richard	75.2*	81.6	20	44.8	41.5	41.5