

The Mix Evaluation Dataset

centre for digital music

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c4dm.eecs.qmul.ac.uk/multitrack/MixEvaluation/

1 Motivation

- Mixing multitrack music is multidimensional and subjective
- Severe lack of data for research on best practices
- -Copyright
- -Reluctance to share unpolished work
- -Limited access to parameter settings
- Many studies resort to lab-based mix creation

2 Dataset

Mix creation

- 180 mixes from sound engineering students in four different countries
- Ecological relevance: preferred environment/tools
- Access to
- -High resolution mixes
- -Raw tracks
- -DAW session files (parameter settings)
- -Processed stems
- -Metadata including instrument labels

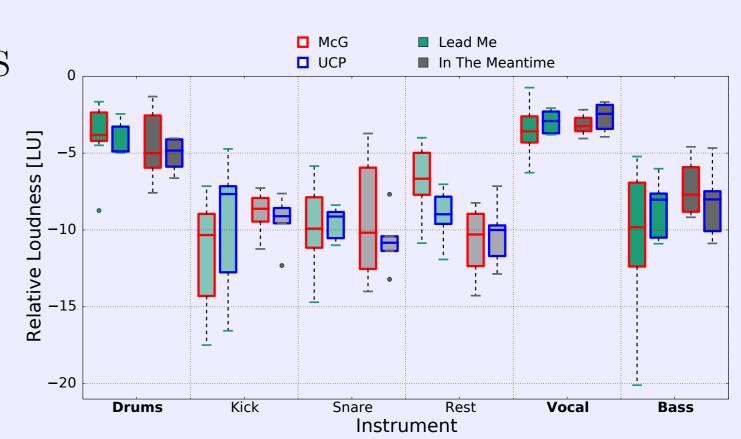
Perceptual evaluation

- 5000 mix evaluations from five different countries
- Hedonic preference ratings and comments
- Detailed annotation of comments
- Subject demographics and surveys

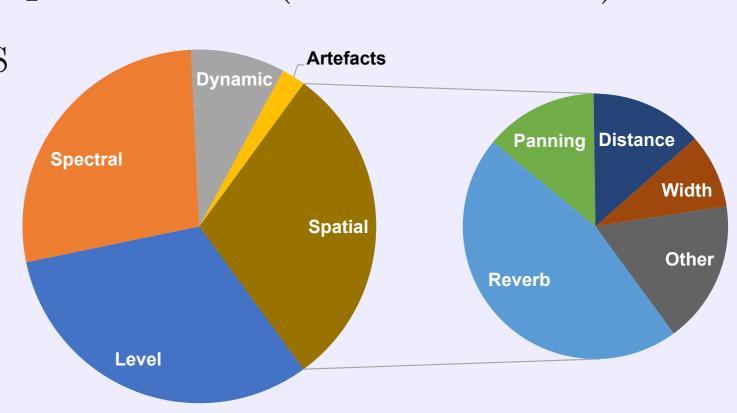
	McG	MG	$\overline{\mathbf{Q}\mathbf{M}}$	SMC	$\overline{\mathrm{DU}}$	PXL	UCP	TOTAL
Country	Canada	a	Unite	d Kingdom	Sweden	Belgium	Portugal	
#subjects	33	8	21	26	39	13	10	150
#songs	10	4	13	14	3	4	7	18
#mixes	98	40	111	116	21	23	42	181
#evaluations	1444	310	1129	639	805	236	310	4873
#statements	4227	585	2403	1190	2331	909	1051	12696
#words/comment	13.39	11.76	11.32	12.39	18.95	31.94	25.21	15.25
Male/female	28/5	7/1	18/3	14/12	33/6	13/0	9/1	122/28
Loudspeakers/headphones	LS	ΗP	LS	HP	LŚ	LS	ĹS	·
"PREFER 6 4 2	ENCE"	3	ı	5	✓ Play mixes Songs: Good MyFunnyValentine RedToBlue YouAndMeAndThe Mixes (26): DU-A	NewSkin Nol SeaOfLeaves So	InTheMeantime L Prize NotAlone angA SongB	eadMe Lolita Lush OldTree PouringRoom UnderACoveredSky Vermont DU-G McG-A McG-B McG-C
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<u>f 4</u>	ENCE"	3		5	Songs: Good MyFunnyValentine RedToBlue YouAndMeAndThe Mixes (26): DU-A McG-D McG-E UCP-A1 UCP-A2	NewSkin Nol SeaOfLeaves So DU-B DU-C [McG-F McG-G M UCP-A3 UCP-A4 Uf	Prize NotAlone ongA SongB DU-D DU-E DU-F McG-pro2 PXL-L1	OldTree PouringRoom UnderACoveredSky Vermont DU-G McG-A McG-B McG-C
Bad Poor Fair		Good	Exc	5 ellent	Songs: Good MyFunnyValentine RedToBlue YouAndMeAndThe Mixes (26): DU-A McG-D McG-E UCP-A1 UCP-A2	NewSkin Nol SeaOfLeaves So DU-B DU-C [McG-F McG-G N	Prize NotAlone ongA SongB DU-D DU-E DU-F McG-H McG-pro2 PXL-L1 CP-A5 Subjects (36):	OldTree PouringRoom UnderACoveredSky Vermont DU-G McG-A McG-B McG-C
Bad Poor Fair		gment 2	Exc	ellent	Songs: Good MyFunnyValentine RedToBlue YouAndMeAndThe Mixes (26): DU-A McG-D McG-E UCP-A1 UCP-A2 McG-I 54% less: McG-J 76% Bass McG-K 50% muff McG-L 86% Vox of th — Vox	NewSkin Nol SeaOfLeaves So DU-B DU-C [McG-F McG-G N UCP-A3 UCP-A4 Uf snaps. please a little forward, different space led bass, overall image is sligh too quiet. drums sound swag b 2 & 4 gtr ++; sounds like a rec too quiet.	Prize NotAlone ongA SongB DU-D DU-E DU-F McG-H McG-pro2 PXL-L1 CP-A5 Subjects (36): te than vocals, quite clear, ontly narrow ut are too loud; good amount of coord, too much sub bass.	OldTree PouringRoom UnderACoveredSky Vermont DU-G McG-A McG-B McG-C
Bad Poor Fair ment on fragment 1 e and open. Vocal could be a bit louder but great otherwise. ment on fragment 3	Comment on fragounds thin, vocal barely	gment 2 y audible gment 4		rellent	Songs: Good MyFunnyValentine RedToBlue YouAndMeAndThe Mixes (26): DU-A McG-D McG-E UCP-A1 UCP-A2 McG-J 76% Bass McG-K 50% muff McG-L 86% Vox of th - Vox - drum + good	NewSkin Nol SeaOfLeaves So DU-B DU-C I McG-F McG-G N UCP-A3 UCP-A4 U snaps. please a little forward, different space led bass, overall image is sligh too quiet. drums sound swag b to 2&4 gtr ++; sounds like a receive quiet. vocal level, as sound swag but are too loud; amount of bass frequencies (bg	Prize NotAlone ongA SongB DU-D DU-E DU-F McG-H McG-pro2 PXL-L1 CP-A5 Subjects (36): te than vocals, quite clear. tilly narrow out are too loud; good amount of loud, too much sub bass. track (in the property of the pro	OldTree PouringRoom UnderACoveredSky Vermont DU-G McG-A McG-B McG-C PXL-L2 PXL-L3 PXL-L4 Robot bass frequencies (bgtr & kik); reasonable person's
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Bad Poor Fair ment on fragment 1 e and open. Vocal could be a bit louder but great otherwise. ment on fragment 3 inding drums, but overall balance is off. Where is the guitar?	Comment on fragounds thin, vocal barely Comment on fragous guitar has odd EQ,	gment 2 y audible gment 4 distracts from ever	rything else.	ellent	Songs: Good MyFunnyValentine RedToBlue YouAndMeAndThe Mixes (26): DU-A McG-D McG-E UCP-A1 UCP-A2 McG-J 76% Bass McG-K 50% muff McG-L 86% Vox of th - Vox - drum + good + reasc + soun - too re	NewSkin Nol SeaOfLeaves So DU-B DU-C I McG-F McG-G N UCP-A3 UCP-A4 U snaps. please a little forward, different space led bass, overall image is sligh too quiet. drums sound swag be 2 &4 gtr ++; sounds like a rect too quiet. vocal level, as sound swag but are too loud: amount of bass frequencies (bg onable person's panning of the ds like a record. general	Prize NotAlone IngA SongB DU-D DU-E DU-F McG-H McG-pro2 PXL-L1 CP-A5 Subjects (36): te than vocals, quite clear, and parrow ut are too loud; good amount of coord, too much sub bass. tyr & kik); general kick 2&4 gtr ++; guitar panni spectral	OldTree PouringRoom UnderACoveredSky Vermont DU-G McG-A McG-B McG-C PXL-L2 PXL-L3 PXL-L4 Robot bass freqencies (bgtr & kik); reasonable person's
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3 Applications

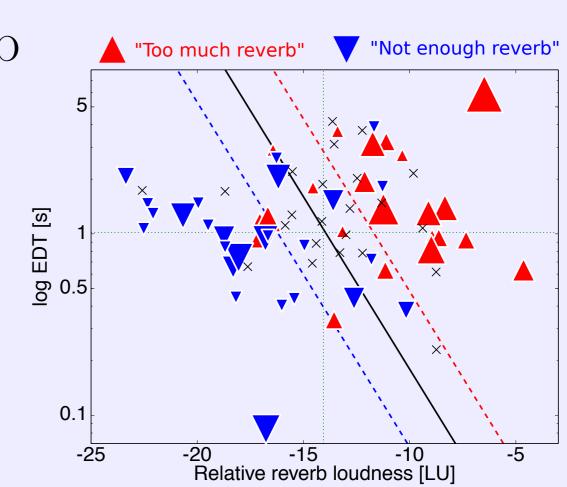
Audio feature analysis(De Man 2014)



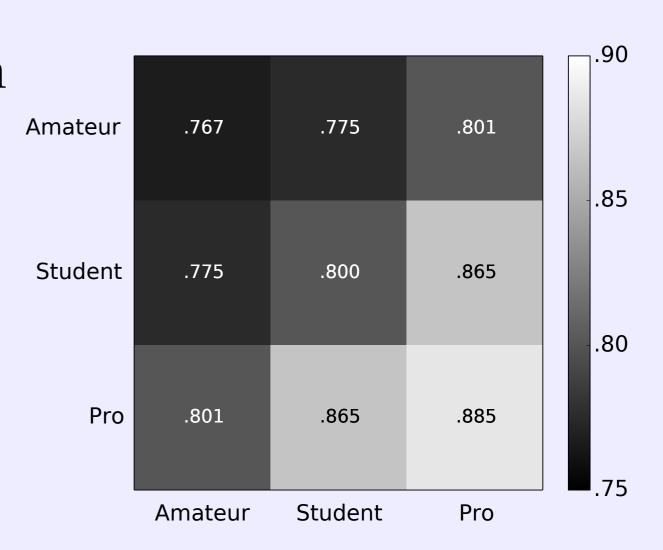
- Impact of features on preference (De Man 2015)
- Comment analysis (De Man 2015)



- Subgrouping practices (Ronan 2015)
- Use and perception of reverb (De Man 2017)



• Impact of expertise on agreement of statements



- Peer reviews relevant to educators and students
- •...?

4 Contribute

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- Donate multitrack audio
- Create mixes
- Participate in listening tests

