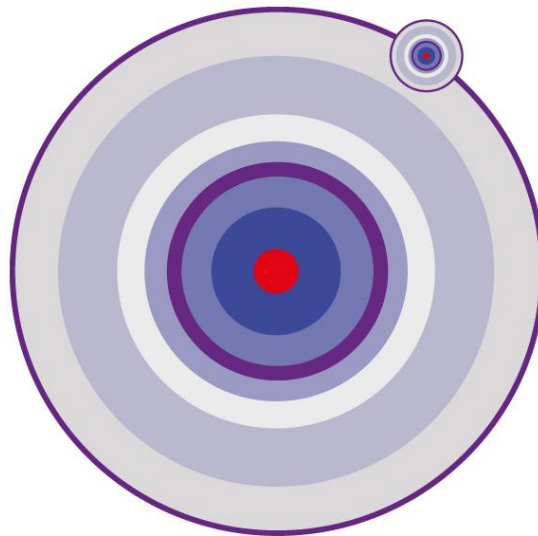


D5.1 Intermediary summary of all events organised



MIReS

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EC Project Officer	Rainer Typke
Abstract	This document collects all events organized within WP5 Community Co-creativity and New Knowledge Generation (Hubs and Spokes) until June 2012. The tasks included in this WP are designed to build better and tighter bridges between the MIR academic, industrial and artistic communities on one hand, and other relevant complementary communities on the other hand, such as e.g. hackers/freelancers, artists and students.
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1 BACKGROUND

This document collects all events organized within WP5 Community Co-creativity and New Knowledge Generation (Hubs and Spokes) until June 2012. The tasks included in this WP are designed to build better and tighter bridges between the MIR academic, industrial and artistic communities on one hand, and other relevant complementary communities on the other hand, such as e.g. hackers/freelancers, artists and students.

The conferences and events in WP5 include both special sessions in already consolidated conferences and new and disruptive event formats where several MIR research topics and questions are identified and shared between the participants who do not only write a position statement, but also imagine future MIR research directions which are valuable input for the roadmap in process.

2 INTRODUCTION

WP5 has been conceived specifically in view of generating new knowledge which aid the roadmapping process, through a series of events specifically design to achieve MIReS results. The main objective of this WP is to gather information from experts in various fields that can be relevant for writing the MIR Roadmap.

We aim at accomplishing this by organizing events with different types of communities, in different formats and addressing different topics related to the Roadmap. The main goal of the events has been to promote interdisciplinary discussions around MIR among people coming from very different backgrounds and interests.

Another important goal of this WP is to promote networking between the different communities related to MIR and the promotion within them of the key concepts of the Roadmap. These activities allow the MIReS working team to evaluate and consider what these communities are expecting from MIR research and development now and – more importantly – what will be the worth of MIR in the future in terms of relevant values (scientific, technological, economic, artistic, etc.) and enable to consequently identify future directions for MIR research topics.

2.1 Expected outcomes

The main results to be obtained at the end of the project through the events and activities within WP5 are:

- High quality contributions to the key thematic areas of the MIR roadmap;
- Awareness and understanding of identified communities' key actors with respect to MIR research topics and
- Networking and community building between MIReS partners and external stakeholders in the field (which is valuable input for WP6).

2.2 Type of events organised

We specially target academic and industrial events and take advantage of the most relevant conferences / event formats currently existing, thus covering the core research topics of the MIR field and the applications from different points of view: academic, industrial and artistic.

- Academic events

Academic conferences are an important public assessment point for the MIReS Coordination Action. Gathering of information will be organized in a way to promote brainstorming on specific topics with the aim to include it in the roadmap.

- Events involving industry representatives, outside experts and future users

Since the field of Music Information ReSearch is expected to have a considerable impact on the multimedia market economy and related fields within creative industries (entertainment, mobile services, gaming, virtual/augmented reality, etc.) several workshops involving key EU industry representatives are included with the goal of i)

exploring future MIR applications and possible barriers from the industry point of view and ii) catering for quick technology transfer turnarounds.

- Events involving artists and musicians

Creative insight into the discipline are sought through 'art meets science' events, gathering input from artists working with interactive technologies and music performers from different cultural backgrounds. These events encourage exchange of ideas with artists and musicians, and expand the Music Information ReSearch stakeholders network.

2.3 List of events due June 2012

The list and categorization of WP5 events is as follows. All contributions gathered from different communities involved in conferences, workshops, roundtables and other events are being collected into a summary which is directly influencing the MIREs roadmap.

Event title	Dates	Location	Organizer*	Partners attending	Target
Workshop on Computational models for Music Information ReSearch (MIREs) with multicultural focus in the frame of the KIIT-Gurgaon Festival	Jan 20 th , 2012	India	UPF-MTG	-	Academic and artistic
AdMIRE 2012: 4th International Workshop on Advances in Music Information Research	Apr 17 th , 2012	Lyon	OFAI	UPF-MTG	Academic
Music Tech Fest, including Music discovery and creativity workshop, 3D Hack Camp and Industry trendspotting event	May 17 th - 19 th , 2012	London	STRO, BMAT	QMUL, INESC PORTO	Artists and musicians, end users and Industry representatives
MIREs panel discussion 'Technological challenges for the computational modeling of the world's musical heritage' at INFLA / FMA 2012	May 20 th , 2012	Seville	IRCAM, UPF-MTG	STRO, QMUL	Academic
MIREs roundtable 'MIR and creation'	Jun 2 nd , 2012	Paris	IRCAM	UPF-MTG	Academic and artistic
MIREs Panel 'Make, Play, Share: the Future of Music Tech' at Sonar Festival	Jun 14 th , 2012	Barcelona	STRO, BMAT, UPF-MTG	QMUL	Industry representatives and outsiders
Music Hack Day at Sonar Festival	Jun 14 th - 15 th , 2012	Barcelona	UPF-MTG	STRO, BMAT, QMUL	Industry representatives and future users
MIREs Panel 'The Future of Music Information Research' in the frame of CMMR 2012	Jun 17 th , 2012	London	QMUL	UPF-MTG	Academic

*The partner organizing the event is always attending it, so it would be not included in the raw 'Partners attending'

3 EVENT CLIPPING

This section details all events organised, including the basic information like location, dates, attendees and website, as well as information related to the content such as speakers and the most relevant contributions to the roadmap in progress.

3.1 Workshop on Computational models for Music Information ReSearch in the frame of the KIIT-Gurgaon Festival

EVENT INFORMATION	
Event title	KIIT-Gurgaon Festival
Partner organising	Universitat Pompeu Fabra – Music Technology Group
Dates	January 20th 2012
Location	Kamrah International Institute of Technology, KIIT Campus, Sohna Road, Near Bhondsi, Gurgaon, Haryana, India
Tags	Multiculturalism
Proceedings URL	http://compmusic.upf.edu/node/111
Other remarks	satellite event of FRSM 2012

MIReS EVENT / Activity	
Event title	Computational Models for Music Information ReSearch
Topics addressed	Current research issues and initial results (Xavier Serra) Hindustani Music: A case for computational modeling (Preeti Rao) Carnatic Music: A signal processing perspective (Hema Murthy) Carnatic Music: A musicians perspective (T. M. Krishna) Hindustani Music: A musicians perspective (Pt. Buddhadev Dasgupta) Distribution based computational analysis of Makam Music (Bariş Bozkurt) Machine learning for music discovery (Joan Serra) Panel discussion (moderator: Xavier Serra; panelists: Preeti Rao, Hema Murthy, Bariş Bozkurt, T. M. Krishna, Mallika Banerjee)
Nature	Workshop
Invited speakers	Pt. Buddhadev Dasgupta T. M. Krishna

	<p>Mallika Banerjee</p> <p>Bariş Bozkurt</p>
Nr. of attendees	40
Relevant contributions	<p>FRSM is an annual event with 20 years of history. It focuses on speech and music and has a strong emphasis on young researchers. The main person behind the conference is Prof. Ashoke Datta, a very senior and active researcher that has been collaborating with ITC-SRA and doing research in Indian music for a long time.</p> <p>In the opening talk of the workshop Xavier Serra covered some of the initial research efforts in the CompMusic project which are fully aligned with the concerns about multiculturalism included in MIREs roadmap. Within CompMusic project we are working on the computational modeling within five main topics: intonation, melody, rhythm, on-line communities, and music discovery tools. These topics have to be understood within each particular music culture and each one requires a specific research approach. The work team has realized that most of the definitions of relevant music concepts, like melody and rhythm, found in the literature have a western bias and they are trying to redefine them within our particular cultures and for their research goals. In the talk Xavier Serra also showed a mock up and a very preliminary version of the CompMusic Browser, a tool for exploring the music collections of the different repertoires. The Browser's intended functionality is quite indicative of their research objectives and it will be used as the major demonstrator of their technological results.</p> <p>Preeti Rao, who leads the research team at IIT-Bombay, gave a talk on "Computational modeling for Hindustani music". She talked about some of the tools that can be used to analyze Hindustani music and then she described the use of pitch contours to understand the melodic characteristics of the music. She presented her team's work on melodic transcription.</p> <p>Hema Murthy, who leads the research team at IIT-Madras, gave a talk on "Carnatic Music: Signal Processing Perspective". She started by introducing the structure of a Carnatic music concert and then focused on the issue of pitch analysis of Carnatic music. She presented her team's work on the analysis and synthesis of pitch contours, specifically on Gamakaas. She also introduced their first results on time-frequency representations aimed at separating the voice from the accompaniment instruments, work that could be used to better analyze the gamakaas and phrases sung by the lead voice.</p> <p>Pandit Buddhadev Das Gupta, a well-recognized Hindustani musician and sarod maestro, gave a talk about how technology has been used in</p>

Hindustani music. He talked about electronic shruti boxes, synthesizers and proposed the use of computers for education, generating melodies to be learned or for slowing down audio recordings so details of a performance are better perceived.

T. M. Krishna, one of the leading Carnatic music vocalists, gave a talk on Carnatic music from a historical perspective, focusing on melodic issues. He pointed out that the Indian music of the early times, around 2nd and 3rd century AC, did not use a fixed pitch (fixed tonic), and instead, the common practice was to use fixed frequencies for the notes, which is the inverse of what is used now. From this view he argued that the use of 22 shrutis as a way to divide an octave is not relevant today, that it is a concept of the past. He also emphasized that a note is not a specific frequency position, instead it is a frequency region. Also he made the point that the original ragas were collections of motives, or melodic phrases and that it was later when new ragas started to be defined as collections of notes, scales. This is why we currently find both phrase-based and scale-based ragas. Another topic that he covered was the issue of gamakas and their importance in defining ragas and he also talked about the different compositional forms used in Carnatic music. He finished his presentation by talking about the treatise "Sangita Sampradaya Pradarshini" by Subbarama Dikshitar, published in Telugu in 1904. He has been involved in the rendering of the compositions notated there following the descriptions included in the treatise, thus following to the performance practice of the time.

Bariş Bozkurt, invited expert in Turkish-makam music, gave a talk on "Distribution Based Computational Analysis of Makam Music". His talk was mainly an introduction to the makam music of Turkey and to the work that his team has done on the analysis of that music. He made special emphasis on the issues of notation and tuning and on his signal processing work to automatically describe intonation and to recognize the makam used in a given piece. This work is quite relevant for a number of the issues that the study of Indian music is faced with.

The last talk of the workshop was given by Joan Serrà, a post-doc researcher working in Barcelona. His talk was entitled "Machine Learning for Music Discovery" and he gave a quick overview of the field of machine learning as it is used for music description, currently applied to western music. He made a lot of emphasis on how to best use of the different machine learning methods in specific problems. Most of the presented methods and approaches should be of relevance to indian music.

The workshop ended with a panel discussion with the participation of Preeti Rao, Hema Murthy, Bariş Bozkurt, T. M. Krishna, and Mallika Banerjee (a Hindustani vocalist from Delhi). The aim of the panel was to talk about melodic and rhythmic characteristics of both Hindustani and

	<p>Carnatic music, trying to focus in the differences between the two cultures. It was clear that is very difficult to formalize the characteristics of such rich musical cultures; there are many styles, approaches to improvisation and many factors that influence a given musical performance.</p> <p>The workshop was very successful. We were able to have a fruitful dialog between engineers and musicians.</p>
Further details	http://compmusic.upf.edu/node/111

3.2 AdMIRE 2012: 4th International Workshop on Advances in Music Information Research

EVENT INFORMATION	
Event title	AdMIRE 2012: 4th International Workshop on Advances in Music Information Research: "The Web of Music"
Partner organising	OSGK-OFAI
Co-organisers	Markus Schedl, Department of Computational Perception, Johannes Kepler University, Linz, Austria Peter Knees, Department of Computational Perception, Johannes Kepler University, Linz, Austria Oscar Celma, Gracenote, Emeryville, CA, USA
Dates	4/17/2012
Location	Lyon, France
Tags	Music Information Systems Multimodal User Interfaces User Modeling, Personalization, Music Recommendation Context-aware and Mobile Music Information Retrieval Music in the Cloud Web Mining and Information Extraction Collaborative Tags, Social Media Mining, (Social) Network Analysis Semantic Content Analysis and Music Indexing Hybrid Approaches using Context and Content Large-Scale Music Similarity Measurement, Scalability Issues and Solutions Evaluation, Mining of Ground Truth and Data Collections Semantic Web, Linked Data, Ontologies, Semantics and Reasoning Mining and Analysis of Music Video Clips, Music-Related Images and Artwork
Proceedings URL	http://www2012.wwwconference.org/proceedings/forms/companion.htm#8 http://www.cp.jku.at/conferences/admire2012/
Other remarks	The event has been organised by Schedl, Knees and Celma with partial financial support by OSGK-OFAI through MIREs project

MIReS EVENT / Activity	
Topics addressed	Music Information Systems, Multimodal User Interfaces, User Modeling, Personalization, Music Recommendation, Context-aware and Mobile Music Information Retrieval, Music in the Cloud, Web Mining and Information Extraction, Collaborative Tags, Social Media Mining, (Social) Network Analysis, Semantic Content Analysis and Music Indexing, Hybrid Approaches using Context and Content, Large-Scale Music Similarity Measurement, Evaluation
Nature	Workshop
Invited speakers	Francesco Ricci "Context-Aware Music Recommender Systems", Xavier Serra "Data Gathering for a Culture Specific Approach in MIR"
Nr. of attendees	30
Relevant contributions	<p>The workshop brought together world-class researchers in Music Information Research (MIR) to discuss topics highly relevant for the future of MIR. In particular, the following short-term objectives of MIReS have been addressed in AdMIRe:</p> <ul style="list-style-type: none"> • Formulate research evaluation standards (paper presentations by Urbano and by Bertin-Mahieux) • Assess emerging contexts, such as web mining (paper presentation by Hauger) • Engage researchers from outside the EU (paper presentations by Bertin-Mahieux and by Hankinson, participation of Fujinaga) • Major challenges of MIR (multiculturalism in the keynote by Serra, semantic gap in the paper presentation by Sordo, multimodal information in the paper presentation by Hankinson, personalized and context-aware music retrieval and recommendation in the keynote by Ricci, scalability in the paper presentation by Bertin-Mahieux)
Further details	http://www.cp.jku.at/conferences/admire2012/

3.3 Music Tech Fest

EVENT INFORMATION	
Event title	Music Tech Fest
Partner organising	STRO
Co-organisers	BMAT
Dates	18-19 May 2012
Location	Ravensbourne, London
Tags	music, information festival, talks, demos, performances, speakers, SMEs, artists, performers
Proceedings URL	http://www.musictechfest.org/
Other remarks	The core festival event includes and expands on the aims and objectives of the music industry trend spotting event planned for the WP5 and the proposal for a research-to-industry network in WP6.

MIReS EVENT / Activity	
Topics addressed	<p>The range of topics was very extensive as the festival engaged the entire music technology ecosystem under one roof – from the big brands in the music industry and media, music tech startups and apps creators, to developers, researchers, artists, performers, creatives and hackers.</p> <p>Example topics include: rights clearance, access to music collections for artists and researchers, music data visualisation, metadata creation and management, installation art driven by sound and music data, the impact of research on the music industry and innovative SMEs, new musical instruments driven by data, and performing with data.</p>
Nature	20 minute talks, demos and performances over two days.
Invited speakers	<p>Funded speakers: Frederic Rousseau (IRCAM, research - partner), Christian Blom (artist), Matthew Davies (INESC - research, partner), Oscar Paytuvi (BMAT - SME, partner), Avi Ashkenazi (artist), Adam Place (Alphasphere - artist), Bruno Zamborlin (Mogees - artist and IRCAM/Goldsmiths research), Carles Lòpez (Reactable - artist)</p> <p>Non-funded speakers: Matt Balck (Ninjatune - music industry, and Coldcut - artist), Nicole Yershon (Ogilvy Digital Labs - media industry), Estefania Caño (Fraunhofer / Songs2See - research), Saoirse Finn (QMUL - research, partner), Patrick Bergel (Animal Systems - SME, research), Ben</p>

	<p>Lawrence (Mixcloud - SME), Evan Stein (Decibel - SME), Kim de Ruiter (Noise Inc - SME), Matthew Sherett (Last.fm - SME), Tim Hadley (rara.com / Omnifone - SME), Philippe Perreux (Right Clearing, SME), Cliff Fluet (Lewis Silkin - legal, music industry), Ed Averdieck (Cue Songs - SME), Will Page (PRS - music industry), Michela Magas (Stromatolite - SME and research, partner), Daniel Lewington (MPme / Apsmart - SME), Michael Breidenbrücker (RjDj - SME), Peter Kirn (Create Digital Music - research), Martin Ware (Illustrious - SME and music industry), Tom Cheshire (Wired - media industry), Jason Titus (CTO Shazam - music industry), Dave Haynes (VT Soundcloud - SME and music industry), DJ Ham (Ninjatune - music industry), Martin Macmillan (Soniqplay - SME), Paul D (artist), Olivier de Simone (webdoc - SME), Johann Waldherr (Spectral Mind - SME), Stephen O'Reilly (Mobile Roadie - SME and music industry), Ariel Elkin (London Music Hackspace - research), Jake Williams (artist and Goldsmiths music research), Daniel Jones (artist and Goldsmiths music research), Cassiel (artist), Jason Singh (artist / Victoria and Albert museum resident sound artist and music researcher)</p>
Nr. of attendees	1036
Relevant contributions	<p>Mutidisciplinary cooperations:</p> <ul style="list-style-type: none"> • Several talks and performances highlighted the need for multidisciplinary cooperations, focusing particularly on the collaborations between researchers, innovators, industry and performers. One session was devoted entirely to the impact research can have on commercial companies. The live panel conducted by Tom Cheshire, the Associate Editor of Wired Magazine, with Shazam, Soundcloud, RjDj and Stromatolite, focused entirely on research-to-industry topics and the importance of integrating academic research within industry innovation <p>Rights clearance for researchers:</p> <ul style="list-style-type: none"> • A cluster of talks and demos focused on new systems which use the results of research from research institutions like UPF-MTG and Fraunhofer to create industry standard digital music recommendation and licensing tools for inclusion in commercial platforms. Availability of collections for research and testing was discussed, as well as legal and availability implications. The prevalent consensus seems to indicate a change in the attitude of the music industry that is becoming more willing to work with researchers and make their collections available. <p>SME research and commercial innovation:</p> <ul style="list-style-type: none"> • There was strong evidence from participants that innovative music technology SMEs employ academic MIR researchers to ensure competitiveness in music technology innovation. Eight talks presented tools

	<p>which were developed by teams of researchers who have come from some of the top music tech research units in Europe, including those from MIRÉS partner organisations.</p> <p>The importance of music data for performance tools:</p> <ul style="list-style-type: none"> • Several innovative performance platforms were presented which generate music by using information generated by music or sound environments, crowd-sourced applications, or custom built installations or platforms. The BBC radio programme and podcast reporting on the festival labelled this “the future of music”. <p>The importance of music data for art installations:</p> <ul style="list-style-type: none"> - Four art installations used music data to generate sound-driven sculptural kinetic sound objects or audio-visual environments, thus showing the importance and potential of music data in the visual and kinetic arts.
Further details	<p>All of the talks, demos and performances have been filmed by a full film crew (3 camera angles), were broadcast live over the internet and are being edited for inclusion in the new Music Tech Talks channel on YouTube. Without extensive publicity, the internet live streaming attracted more than 700 viewers from 34 countries.</p> <p>The success of the Music Tech Fest has been to ensure long-term impact through regular involvement of the community of industry, SMEs, artists and researchers and regular gatherings and exchange of ideas, thus forming a research-to-industry network. The stakeholders have agreed to continue recording Music Tech Talks on a regular basis for inclusion on the Music Tech Talks channel. An event is planned for July 26th at the launch of the London Olympics evening programme, which will see community members like Soundcloud, Last.fm and Shazam deliver 20 minute talks to invited audiences and Olympics dignitaries and will be edited for inclusion in the Music Tech Talks channel.</p> <p>The festival generated several articles in the technology press and blogs, and was reported as a series of interviews on the BBC radio and podcast in a special report on “the future of music”.</p>

3.3.1 Synaesthesia Workshops

EVENT INFORMATION	
Event title	Music Tech Fest
Partner organising	STRO
Dates	17 May 2012
Location	Ravensbourne, London
Tags	music, information, creative, sound, colour, artists, designers, animators, film makers, music makers

Proceedings URL	http://www.musictechfest.org/
Other remarks	This workshop fulfils the scope of the planned music discovery and creativity workshops as listed in the WP5 programme. The first day of the festival was devoted entirely to this workshop.

MIReS EVENT / Activity	
Event title	Synaesthesia Workshops
Topics addressed	Music information and creativity
Nature	All day workshop
Invited speakers	Peter Kirn, workshop leader
Nr. of attendees	70
Relevant contributions	Visualisation of music information, interfacing, cross-disciplinary collaboration, vocal sketching, sonification, multimedia representations
Further details	Ideas on "seeing music" we're used as a trigger for an investigation into the relationship between music data and the visual arts. Peter Kirn, author of Create Digital Music (createdigitalmusic.net) and of Synaesthesia workshops at Parsons School of Art in New York was invited to conduct the workshop. Tutorials were focused on methods in Processing and digital media, and examples drawn from digital ways of visualising music. The outcome showed a strong correlation between the interpretation of music and visual triggers. A collaborative application translating visual data to music data was used to generate music by drawing. The final results were presented on the main stage to festival audiences and will be uploaded on the new Music Tech Fest / Music Tech Talks channel on YouTube.

3.3.2 3D Hack Camp

EVENT INFORMATION	
Event title	Music Tech Fest
Partner organising	STRO
Dates	18-19 May 2012
Location	Ravensbourne, London
Tags	music, information, hacking, APIs, tangible interfaces, the Internet of Things (IoT)
Proceedings URL	http://www.musictechfest.org/
Other remarks	This event has covered most of the planned activity from the WP5 hacking event with EU Associate Countries.

MIReS EVENT / Activity	
Event title	3D Music Hack Camp

Topics addressed	Hacking with music information and tangible objects
Nature	Hacking session
Invited speakers	Varun Jewalikar (UPF-MTG), Stylianos Togias (UPF-MTG), Mohamed Sordo (UPF-MTG), Jordi Hidalgo Gomez (UPF-MTG), Sebastian Mealla Cincuegrani (UPF-MTG), Frederic Font Corbera (UPF-MTG), Daniel Gallardo Grassot (UPF-MTG), Gerard Roma Trepas (UPF-MTG), Hector Parra Rodriguez (UPF-MTG), Anna Xambó (ex UPF MTG Barcelona), Cyril Laurier (ex UPF MTG Barcelona), Maya Benainous (games animator, Barcelona), Oscar Paytavi (BMAT, Barcelona), Pau Capella (BMAT, Barcelona), Xavier Francisco (BMAT, Barcelona), Jupi Sehovic (Film Maker and Editor, Kreativni Media Company, Croatia), Sanjin Celeski (Web Designer and Programmer, Kreativni Media Company, Croatia)
Nr. of attendees	30
Relevant contributions	Innovative applications of music information to 3D environments and objects, applications addressing music making through information generated by tangible environments and objects.
Further details	<p>The 3D Music Hack Camp was conceived with the aim of combining the Internet of Things with music information hacking. The concept attracted contributions from some of the best known brands in the media and music industry: EMI, the BBC, Warp, Decibel, BMAT, Cisco, Ninja Tune, Last.fm and Animal Systems. The camp was run by Ariel Elkin from the London Music Hack Space.</p> <p>The event generated novel applications of music information to objects like light sabres, play environments like ping pong tables, as well as new musical instruments and tangible interfaces.</p> <p>The final results were presented on the main stage to festival audiences and have been filmed for upload on the new Music Tech Fest / Music Tech Talks channel on YouTube.</p> <p>The main award ceremony will be held on the Music Tech Talks event on the 26th of July 2012, in 360° projection domes set up especially to run the evening programme during the London Olympics.</p>

3.4 MIReS panel discussion 'Technological challenges for the computational modeling of the world's musical heritage' at INFLA / FMA 2012

EVENT INFORMATION	
Event title	III Interdisciplinary Conference on Flamenco Research – INFLA and II International Workshop on Folk Music Analysis - FMA
Partner organising	Music Technology Group, Universitat Pompeu Fabra
Co-organisers	IRCAM and Universidad de Sevilla
Dates	April 19th-20 th , 2012
Location	Seville, Spain
Tags	Folk music analysis, computational ethnomusicology, interdisciplinary
Proceedings URL	http://congreso.us.es/infla3/en/index.html

MIReS EVENT / Activity	
Event title	Panel discussion: Technological challenges for the computational modeling of the world's musical heritage
Topics addressed	<p>Challenges for building computational models of the world's musical heritage.</p> <ul style="list-style-type: none"> • How to foster collaboration between researchers from different disciplines (musicologists, musicians, engineers...)? • Is it right to focus on single culture studies rather than approach musical phenomena cross-culturally? • Which should be our next steps in establishing ethno-Music Information Retrieval (ethno-MIR)?
Nature	Panel discussion & workshop
Invited speakers	Polina Proutskova
Nr. of attendees	30
Relevant contributions	In the panel, we discussed the topics listed below. We provide here the main conclusions:

	<p><i>How to foster collaboration between researchers from different disciplines (musicologists, musicians, engineers...)?</i></p> <ul style="list-style-type: none"> • Need to build truly interdisciplinary teams • It's important to turn computational modes into usable tools that ethnomusicologists or musicologists can use. • We should define new methodologies adapted to the use of technology for ethnomusicological studies. <p><i>Is it right to focus on single culture studies rather than approach musical phenomena cross-culturally?</i></p> <ul style="list-style-type: none"> • We need to study single cultures but at the same time we need to keep links and collaborations between cultures to perform cross-cultural analyses. <p><i>Which should be our next steps in establishing ethno-Music Information Retrieval (ethno-MIR)?</i></p> <ul style="list-style-type: none"> • Create an ethno-MIR Special Interest Group within the ISMIR society. • Organize an annual meeting during ISMIR. • Establish FMA as an annual forum for ethno-MIR • Write grant proposals for collaborations in ethno-MIR; in particular a proposal for a European COST action that would support conferences and workshops in ethno-MIR
Further details	http://congreso.us.es/infla3/en/programa.html

Report of the panel "Challenges for building computational models of the worlds musical heritage" » held at the International Workshop of Folk Music Analysis – FMA, April 20th, 2012 (report by Geoffroy Peeters - IRCAM)

The panel was organized around three main questions.

First question. "How to foster collaborations between researchers from different disciplines (including musicologists, musicians, engineers, and others)?" Over the discussions following this question, it appeared that there is a lack of communication between computer-scientists and musicologists. A special effort has to be made to learn the language of the other. It was mentioned that it is difficult to be both specialist in computer-science and musicology. Strengthening collaboration between both worlds should be favoured. It was proposed to initiate these collaborations by defining small projects that involve people from different backgrounds. Tzanetakis journal on multi-disciplinary works, the AAWM conference, and the new inter-disciplinary of music studies (Parncutt), were cited as good initiatives in this sense. Currently, musicologists are not using the computer-scientists software's (the so-called M.I.R. tools). Several reasons have been proposed for that: - the tools are not easily available (not

documented or difficult to use), - the generation-gap (young students in musicology are computer-educated but less the old ones who teach), - description provided by M.I.R. tools does not feed the needs of musicologists and are not 100% accurate. Concerning this last point, some participants believe that the software should provide 100% accurate descriptions to be trusted by musicologists; other believe that software should only provide suggestions and that it is the role of the musicologist to make the final decision. Finally, a proposal for "quantitative" musicology (as opposed to "qualitative" musicology) was made in order to move closer the two worlds.

Second question: "Is it right to focus on single culture studies rather than approach musical phenomena cross-culturally?" Pros and cons of being single-culture-centered or cross-culturally were discussed. Single-culture-centered: It seems that for (a large) part of musicologists being cross-cultural doesn't make any sense since each culture has its own needs of descriptions and models. From a M.I.R. point-of-view, required tools are different and performances of dedicated M.I.R. tools are much better than universal tools. Cross-culturally: At the beginning of the 20th century, ethno-musicology was called "comparative" musicology. Also in musicology, many books deal with Baroque music, whatever coming from France, England, Spain or Italy. It was mentioned that cross-cultural studies are positive because they offer a perspective. Even for simple computational music analysis tools, comparing classical music analysis with other cultures allows to realize that all the representations used depend on the particular culture and that something more abstract is needed. According to the participants, both approaches are interesting but involve different questions, methodologies and lead to different results.

Third question: « Which should be the next step in establishing ethno-music-information-retrieval", "how do we organize our-self?» The questions on whether or not the FMA workshop should continue, should be more opened or in the opposite restricted to selected people, should the FMA be integrated as a special session inside ISMIR, inside the "inter-disciplinary musicology" conference or other conferences were discussed. The difficulty of integrating ethno-MIR in an external conference was also discussed: are reviewers able to review such multi-disciplinary papers? can this subject be mixed with other subjects (sociology)?

It was also proposed to better promote ethno-MIR: stimulate people to participate to FMA (reducing the 4 pages submission to abstract-only), creating datasets, MIREX tasks, doing tutorials, educating MIR people.

3.5 MIREs roundtable 'MIR and creation'

EVENT INFORMATION	
Event title	Workshop on "M.I.R. and Creation"
Partner organising	IRCAM, Paris, France
Dates	June 2 nd , 2012
Location	Paris, France
Tags	M.I.R., audio features, music creation, real-time, installation, interaction, sensors, captures
Proceedings URL	http://recherche.ircam.fr/anasy/peeters/pub/workshop_mir_creation/

MIREs EVENT / Activity	
Topics addressed	<p>The goal of this workshop is to invite key actors to give their viewpoint on the use of M.I.R. technologies for creation. Speakers were:</p> <ul style="list-style-type: none"> • Geoffroy Peeters (IRCAM) Introduction (MIREs) • Gérard Assayag (IRCAM) "Information retrieval and deployment in interactive improvisation systems" • Norbert Schnell (IRCAM) "Gestural Re-Embodiment of Digitized Sound and Music" • Diemo Schwarz (IRCAM) "Interactive Exploration of Sound Corpora for Music Performance and Composition" • Philippe Manoury (Composer) "Audio descriptors: a key issue for real-time composition " • Tristan Jehan (EchoNest) "Playing with Music" • François Pachet (SonyCSL) "VirtualBand, a MIR-approach to interactive improvisation" • Sergi Jorda (IUA/UPF) "MIR beyond retrieval: Music Performance, Multimodality and Education" <p>The keynotes were followed by a round-table</p>
Nature	Workshop made of 7 keynotes of 1 hour each followed by a round-table of 1 hour.
Invited speakers	Outside IRCAM: Philippe Manoury, Tristan Jehan (EchoNest), François Pachet (Sony-CSL), Sergi Jorda (MTG-UPF)
Nr. of attendees	30
Relevant contributions	<p>The whole workshop was dedicated to try to better understand the relationship between "M.I.R. and Creation". This workshop was organized as part of MIREs WP5 and is directly connected to the section currently named "Performance and Artistic applications of M.I.R."</p> <p>Music Information Retrieval (MIR) has been for a long time associated to</p>

	<p>the extraction of information from already-created and already-recorded music in order to facilitate search, navigation and access over music collections. In this workshop, we study how MIR has extended its scope and is now used for the creation process itself. We invite key-actors to give their point-of-view on the present and future of MIR for creation, being at the composition, interaction, performance or research level, at the audio, symbolic and database level.</p> <p>The goal of the workshop is to focus on the use of M.I.R. for Creation, to go beyond "musaicing", to answer the question -what can we do with the Information a-la-ISMIR (audio-descriptors, source-separation, chords, beats, auto-tags) for Creation ? -what other Musical Information can be used for Creation (symbolic, sensors, ...) ?</p> <p>The speakers were invited according to their skills and representativity of a given field: representing research on technologies (Assayag, Schnell, Schwarz, Jorda), composition (Manoury) or industry (EchoNest, SonyCSL).</p>
Further details	<p>http://recherche.ircam.fr/anasyn/peeters/pub/workshop_mir_creation/</p>

Report of the workshop "M.I.R. an Creation" held at IRCAM, Paris, June 2nd, 2012 (Geoffroy Peeters - IRCAM)

The goal of this workshop was to invite key actors to give their view on the use of M.I.R. technologies for creation. The goal was to answer the question - what uses for creation can we do with the Information a-la-ISMIR (audio-descriptors, source-separation, chords, beats, auto-tags)? - What other Musical Information could be used for creation (symbolic, sensors ...)? The speakers were invited according to their skills and representation of a given field: representing research on music technologies (Assayag, Schnell, Schwarz, Jordà), composition (Manoury) or industry (Jehan, Pachtet). The workshop was made up of 7 keynotes of 1 hour each followed by a round-table of 1 hour.

Gerard Assayag mentioned the early used of audio-content information for music creation such as used in the spectral approach of Gerard Grisey or Marco Stroppa and which is today related to the research on automatic orchestration (Carpentier, Tardieu, Esling) such as used by Jonathan Harvey. In these approaches, information contained in an audio signal (chords or timbre) is used to generate a score, which is then played by an orchestra. Another kind of approach relates to the learning of language models (LZ, Factor Oracle) to represent a performer style. Example of automatic improvisation by a computer using this model trained on Coltrane solo or trombone-solo (using the O-Max system) were demonstrated. As said, it was the first time a computer was applauded on stage.

According to Norbert Schnell, nowadays, music creation involves less and less the body; while music listening tends to involve more and more it through interaction. This interaction with music is performed by "re-liquifying" the audio. Many examples of this re-liquifying process of audio were given: - using gestural control to perform direction of pre-recorded music (collaborations with atelier feuillantine), - controlling video beat-boxing segments using a gambling machine (mind-box project), controlling synthesis using a ball within a game (Urban musical game). Many of the paradigms used here for creation are based on "breaking and remaking time". Two possibilities are derived from it: "respect and readapt" or "eliminate and recreate from scratch".

Diemo Schwarz illustrates this paradigm of "eliminate and recreate from scratch" with the CATaRT system. In this system sounds, segmentation and audio descriptors are used to inform a real-time concatenative synthesis system allowing re-creation of any type of sounds or texture from pre-recorded audio or live-recording of audio in real-time.

Philippe Manoury, one of the main composers of today, gave its view from the creation side. He first emphasizes on the difference between composition and improvisation, which involves different time-scale (long and short-term). He then emphasizes on the importance of acquiring knowledge of the sound. Since sounds are always in evolution (from Rameau, Webern to Grisey) audio descriptors are particularly important for a better understanding of sounds. He then provided examples of the use of music information in its pieces: score-following in "Partita-1" and audio-descriptors in "Tensio". He finished by recommending the development of audio descriptors closer to the way we ear and create music.

Tristan Jehan (EchoNest) presented the EchoNest platform, which is possibly the largest content-based M.I.R. recommendation system; used today by record-labels (EMI) and online-music-providers (Spotify). The EchoNest platform is organized around a set of APIs some of which are public. Through the use of these APIs, he illustrates how to make creation with audio-features computed on the millions of songs EchoNest have, using their Remix Python API: wubmachine, videolizer, the swing thing, the walzify, the global sampler. Some of these creative applications are developed during the Music Hack Days, which appears as a very productive place for M.I.R. based creation.

Francois Pachet (Sony-CSL) presented works related to style. For him music is texture and structure. Study of style has been performed in the MIROR project where Constrained Markov Model is used to create for example improvisations or generate blues grid based on Parker chords. In a recent project, Virtual Bands are created. This is done by analysing musicians separately, extracting features and then modeling them using CMM. The system can then be used in real-time to accompany a musician while following its intentions.

Works of the MTG in M.I.R. started with what Sergi Jordà name "traditional M.I.R." (Canoris API, BMAT spin-off or Song-Explorer using the Reactable to navigate over a music collection) dealing more with consuming than producing. According to him, we can distinguish: - micro-MIR for Music Creation (such as plunderphonics, mashup, concatenative synthesis, mosaicing, beat-mash/ loop-mash of Steinberg), - meso-MIR for Music Creation (Freesound.org and its proposed taxonomy of sound, Freesound radio and the possibility to create graph connection between samples, sound-scape modeling) - macro-MIR for Music Creation (expert system such as the LaDiDa app, auto-tune for the news). He then illustrated how M.I.R. and creation does not only concerns music creation. The "Magic Fountain of Montjuic" uses a system developed by the MTG. In this, content-description (audio features extracted from music tracks) drives the light-choreography of the fountain. To conclude, he stresses that "playing music is not the same as playing with music" and that applications should "keep things as simple as simple but not simpler".

3.6 Music Hack Day at Sonar Festival

EVENT INFORMATION	
Event title	Sonar Festival, within SonarPRO (Professional area of the music festival)
Partner organising	Universitat Pompeu Fabra – Music Technology Group
Dates	14-15 June 2012
Location	CCCB, Barcelona http://www.cccb.org/en/
Tags	Art technology, technological innovation, creative industries, ideas debate, experiences sharing, exhibition, live experimentation, demos, showroom
Proceedings URL	The main outcomes of this session (basically hacks submitted) are available here http://wiki.musichackday.org/index.php?title=Barcelona_Hacks_2012
Other remarks	Sonar webpage http://sonar.es/en/2012/ All expenses related to the MHD at Barcelona have been funded through private sponsorship coming from the companies involved in the event.

MIRÉS EVENT / Activity	
Event title	Music Hack Day at Barcelona http://bcn.musichackday.org , organised as satellite event of the Sonar Festival (inside Professional space of the Festival) as 'live experimentation' activity
Topics addressed	Live experimentation, hacking, music, MIR, creation, multimodality, interaction
Nature	The Music Hack Day at Barcelona in 2012 started with 18 presentations from music technology related entities exhibiting the resources available to hackers during the Music Hack Day session. Then participants (or hackers) suggested ideas and built teams, based on individual interests and skills. Then at 14pm the main work of the hacking session began, which lasted 24 hours until the 14pm of the following day (overnight hacking included). At the end of the hacking session, there was a series of demonstrations of the hacks created in which each group of hacker presented their results (a total of 41 hacks were obtained). The best in-show hacks were awarded by a panel of judges from involved companies who selected the winning teams, and the prizes were given at the end.
Invited speakers	Music Tech Company - Speaker 7 digital – William Munn BMAT – Johannes Lyda Deezer – Axel Calandre

	<p>The Echo Nest – <u>Matthew Ogle</u> This is My Jam – <u>Matthew Ogle</u> Freesound - <u>Frederic Font</u> Gracenote - <u>Ching-Wei Chen</u> Last.fm - <u>Matthew Hawn</u> Musescape - <u>Nicolas Froment</u> MusicBrainz - <u>Robert Kaye</u> Musicmetric - <u>Ben Fields</u> MusixMatch - <u>Stefano Rodighiero</u> Reactable - <u>Marcos Alonso</u> SoundCloud - <u>Darrell Stephenson</u> Spotify - <u>Andreas Blixt</u> Ubuntu One - <u>Stuart Langridge</u> Oblong - <u>Miguel Sánchez</u> Zvooq - <u>Andrey Popp</u></p>
Nr. of attendees	<p>30 people representing 18 companies and other entities in the music technology field plus 90 hackers and 10 artists who were in charge of creating applications using involved entities' resources (APIs, SDKs, etc.).</p> <p>About 50 more people attended to the public presentations (companies and hacks' presentations and prize giving session). So the total number of the audience is about 180 people.</p>
Relevant contributions	<p>As a result of the 24-hour hacking session we obtained 41 hacks. The overview of hacks build in the session is as follows:</p> <ul style="list-style-type: none"> • <u>Listen Alongside</u> by Stuart Langridge - Listen to the same music as a friend on Ubuntu One. For jogging or hanging out or silent discos! • <u>Huesound @ Spotify</u> by Robert Kaye - Discover music via colors and cover art on Spotify! • <u>Teach me Nina</u> by MuseScore - Music learning in Google Hangout with MuseScore sheet music • <u>MusicGene</u> by Zvooq - music generation from feature-annotated samples • <u>Free(CC)it!</u> (by Frederic Font and Stelios Togiass) - Create license-free versions of commercial songs using Echonest and Freesound. • <u>Scores4u</u> (by Quim Llimona and Sara Gozalo) - Multi platform application to search for music, lyrics and scores. Visor+editor for scores in HTML5. • <u>Karaoke (by Will Munn)</u> - A simple karaoke web-app • <u>sOSCial</u> by Frederic Jaeckel of SoundCloud - A collaborative OSC controller based on javascript + websockets, designed to control ableton live • <u>Tunemap</u> (by Guillermo Malon, Alberto González, JP Carrascal) - Find out how geographical location shapes contemporary music, with the help of Echonest, Deezer and OpenStreetmaps. • <u>TuitSynth</u> by Jordi Sala of mobilitylab.net - transform the tweets containing HT #sonar2012 into sounds (or noise) in real time with an

	<p>Arduino and a MeeBlip.</p> <ul style="list-style-type: none"> • Music Forecast (by Seb Jacobs) - A simple web app which generates spotify playlists depending on the weather, and your lastfm tastes • Cumulist (by Amélie Anglade and Becky Stewart) - Collaborative playlist interface using Oblong's Substrate library for multiple iOS devices and SoundCloud. • Kinectstrument (by Matthew Larsen) - Play along to your favourite songs using the Kinect • Jamvalanche (by Andreas Jansson and Matthew Ogle) - Antagonizing the slow music movement since June 2012 • Festudy (by Juanjo, Johannes and Mohamed) - Study your next festival by listening to possible sets • Legalize It! (by Ben Fields) - For when you want to listen to the hottest tracks on bittorrent, but you're not so into piracy. • AriHits by Ariel Elkin - A tilt-controlled iOS drum machine that lets you make a beat as a random SoundCloud raps on it. • SongWaver (by Quim Llimona) - Music query by waving! An amazing mobile app for melodic discovery. • Sing your melody (by Kaspar) - Write your scores in MuseScore by singing the pitches • Soundscape Turntablism (by Gerard Roma and Anna Xambó) - Soundscape DJing on a tiny DIY turntable! • Talkrecordin (by Alex, Daniel and Peter) - Record a talk & take pictures of the slides within one app. Watch it all together on talkrecord.in • FreestyleSound (by Marcos Alonso & Javi Agenjo) - Play with the Freesound samples database from the iPad. • HackRap (by Los hijos del sonido volador) - Multimedia real-time collaborative performance • Site Performance (by Darrell Stephenson) - Let the Chrome debugger perform specially for you. • Kulturpark Explorer (by Tank Thunderbird & Erik Woitschig) - Explore an abandoned amusement park • This is my Panda (by Adam Lindsay) - Bringing social network optimisation to TIMJ. • Jamming Invasion (by Aimar Gonzalez, Alfonso Pardo & Javi Aranega) - Space Shooting Game that it's generated by recorded or live music. Mobile & desktop application. • Moodorama (by Ching-Wei Chen & Jaume Sanchez) - Remember the soundtrack of your travels with a mood-tinted panoramic re-creation. • Genre Cats (by Phillip Popp) Bring kittens into the music biz. • Paintlist (by Phillip Popp) Create a playlist by drawing your moods. • ilikemysound (by Wernfried Lackner + Stefan Kersten) Order a T-Shirt with QR code to show off the sounds you like. • Comments Sync (by Jaume Sanchez) Video-clip created with Soundcloud data
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	<ul style="list-style-type: none"> • <u>Moodmash</u> (by David Yerrington) Display the moods from your top tracks on Last.fm • <u>MashTV</u> (by Hector Parra, Jordi Hidalgo & Oscar Casanovas) - Creates a mashuped personal TV channel using parts of different related songs from youtube and the echonest remix API. • <u>VirtualMuseum</u> (By Oriol Fernandez) Creates a virtual museum for the selected artist from EchoNest API's • <u>GoldbergReactions</u> (By Johan) How to people react to the Goldberg Variations • <u>Spotify Poetry</u> (by Ricardo Vice Santos) - Create and share a Spotify playlist based on a sentence or poem. Inspired by spotifypoetry.tumblr.com and <u>Esta lista no se escucha, se lee:</u> by José María Díaz • <u>Twealtime</u> (by Andreas el Sueco Blixt) - Real time Twitter hottest tracks • <u>Soft Singing Radio Hack</u> (by Nela Brown and Chris Rea) - Circuit-bending children's toy to find interesting sounds. • <u>DoodleRadio</u> (by Nick Dima & Pierpaolo Di Panfilo) - A doodled radio playing lyrics shared on twitter, using Spotify or Deezer as player. • <u>ReverseThesia</u> (by Stromatolite) - Sound to colour using the different sound frequencies.
Further details	<p>All hack presentations and award-giving session recordings are available here http://www.youtube.com/playlist?list=PL76079818BE31A2D1&feature=plcp</p> <p>All pictures are available here http://www.flickr.com/search/show/?q=musichackday+barcelona+2012&d=taken-20120601-20120713&ss=0&ct=0&mt=all&adv=1</p>

3.7 MIREs Panel 'Make, Play, Share: the Future of Music Tech' at Sonar Festival

EVENT INFORMATION	
Event title	Sonar Festival, within SonarPRO (Professional area of the music festival)
Partner organising	BMAT, STRO
Co-organisers	UPF-MTG
Dates	June 14th 2012
Location	Barcelona, Spain
Tags	Folk music analysis, computational ethnomusicology, interdisciplinary
Proceedings URL	http://www.mires.cc/MIREsForum%40SonarPro http://sonar.es/en/2012/pg/ideas-debate_48
Other remarks	-

MIREs EVENT / Activity	
Event title	MAKE, PLAY, SHARE: The future of MusicTech
Topics addressed	The Sonar Panel is a discussion amongst Relevant Music Industry players which intended to look into the future of the Music Industry from three perspectives: Search & Discovery, Creativity and Rights Management and gather first-hand feedback from relevant industry players. Music Cataloguing, Music Search and Recommendation, Interfaces, Playlist Generation, Music format, Mobile applications, charts, tagging, Music Databases, Music services interoperability
Nature	Panel discussion
Invited speakers	Jamillah Knowles, BBC journalist Alex Loscos, co-founder & CEO at bmat.com Olivier de Simone, Founder at webdoc.com Scott Cohen, Founder and VP International at theorchard.com Michela Magas, innovation catalyst at Stromatolite.com Robert Kaye, founder and lead developer for MusicBrainz.org, and President and Executive Director of the MetaBrainz Foundation Matthew Hawn, Vice President, Product at Last.fm

Nr. of attendees	40
Relevant contributions	<p>The discussion spanned 1h20 so a big number of topics were brought up. Please, see below some of the contributions which are taken into account in the Roadmap:</p> <ul style="list-style-type: none"> • Music recommendation: Is it as good as a Human Recommendation? For some speakers, Music recommendation is as good as it can be. For some others, there is still a long road ahead for every user to have their own John Peel. Also, Music recommendation still lacks to take the time factor; the sociocultural evolution of what a given song/artist represent. This is a big topic which should be addressed. • Music charts: Most of the speakers agreed that they are still relevant. Music is emotion and connecting with people. Listening to the same songs as your peers is a way for creating bonds with them. The charts are now more granular per tag/micro styles/community of friends.... • Geographically tagging: is very relevant for music personalization. • Music services Interoperability: it is very necessary in order to create new user experiences. Musicbrainz is trying to reach that by building a unified music metadata database. New tools have appeared in the last years to resolve content regardless across music repositories, streaming services and geographic territories (http://www.tomahawk-player.org/). • Playlist generation (Music Listening experience): it was agreed that, being music basically emotion, new music experience tools must focus on emotional coherent experiences. • User experience: "why music services still look like music spreadsheets?" More research is required in tangible and visual interfaces... Songs are no longer 3 minute long mp3 files but can be hours long and divided into tracks available through the artist mobile app. • Unified Music Database: having a Unified universal metadata database for musical assets is key for building the music rights tracking systems of the future.
Further details	https://vimeo.com/44923943

3.8 MIReS Panel 'The Future of Music Information Research' in the frame of CMMR 2012

EVENT INFORMATION	
Event title	The Future of Music Information ReSearch, a panel discussion within the scopes of CMMR 2012 conference.
Partner organising	Centre for Digital Music, QMUL
Co-organisers	CMMR 2012
Dates	June 21st, 2012
Location	London, UK
Tags	music and emotions, emotion and mood recognition, historical and computational musicology, MIR social and cultural impact
Proceedings URL	http://cmmr2012.eecs.qmul.ac.uk/sites/cmmr2012.eecs.qmul.ac.uk/files/pdf/CMMR2012ProcceedingsFinal.pdf

MIReS EVENT / Activity	
Event title	The Future of Music Information ReSearch
Topics addressed	<p>On-going debate on musical emotion:</p> <ol style="list-style-type: none"> 1. music-induced mood and emotion - are they the same or different? 2. are musical emotions "real"? 3. perceived and felt emotion - are they the same or different? 4. are musical emotions similar to other emotions? 5. what are the best models of musical emotion? 6. musical emotion = aesthetic experience? 7. role of expertise, gender, culture and social context? 8. most studies relaying on self-reports of emotions - are they trustful? <p>MIR tools/systems for historical musicology which extends its exploration focus from score analysis to performance analysis</p> <ul style="list-style-type: none"> • current industry oriented applications not suitable for the musicologist • mainly text/label based information retrieval from available commercial databases • music as a dynamic process needs sufficient tools to track its key temporal changes within the whole structure <p>Provocations about CMMR research and musical value</p> <ul style="list-style-type: none"> • music is important for us, we are emotional about music • are we confusing between the two: being emotional about music and

	<p>recognising emotions in music?</p> <ul style="list-style-type: none"> • if we care about music so much, why do we not treat it as if with cotton gloves, like a precious item? • it is not true that we do not have an effect on music that we research by doing our research, if we think that music cannot be spoiled we are wrong • nowadays music experience has become an individual experience associated with travel thanks to MP3 compression algorithms • What is CMMR research doing to musical culture, what are the consequences? <p>Expanding the musical object (from the score centralised to the sound file centralised)</p> <ul style="list-style-type: none"> • the performance in context (in social sciences of music) <ul style="list-style-type: none"> • place • time • participants • social function • psychological state of participant(s) • liveness <ul style="list-style-type: none"> • unfolding in present time • others listening with you • spatial arrangement • behavioural cues from performers • behavioural cues from audience members <p>Addressing human benefit</p> <ul style="list-style-type: none"> • social benefit <ul style="list-style-type: none"> • limited resources • responsibility not to waste them • prioritise work that contributes to wellbeing, social welfare, social justice • false logic <ul style="list-style-type: none"> • music is of social benefit • my research is on music • therefore my research has social benefit
Nature	A panel discussion within the scopes of CMMR 2012 conference.
Invited speakers	<p>Prof. Geraint A. Wiggins (C4DM, Queen Mary University of London)</p> <p>Prof. Joydeep Bhattacharya (Goldsmiths, University of London)</p> <p>Prof. Tim Crawford (Goldsmiths, University of London)</p> <p>Dr. Alan Marsden (LICA, Lancaster University)</p> <p>Prof. John Sloboda (Royal Holloway University, Guildhall School of Music & Drama)</p>
Nr. of	around 50

attendees	
Relevant contributions	<p>Addressing MIREs challenges:</p> <ol style="list-style-type: none"> 1. What is CMMR research doing to musical culture, what are the consequences? <p>Two suggestions for research projects which treat music as if with cotton gloves:</p> <ul style="list-style-type: none"> • a search engine for pleasant surprises (f.e. a competition to generate playlists for an internet radio station accessible during an ISMIR conference; the winner would be the one who had attracted most listeners) • a sound-file player which respects the structure of music and goes back to the beginning of the phrase when resuming after a pause <ol style="list-style-type: none"> 2. Expanding the musical object to the sound file centralised object including the performance context and liveness. <ul style="list-style-type: none"> • Can context and liveness be retrieved by MIR? • Is MIR "finding the music you want"? • If so, can MIR extend its remit from past recorded performances to future live ones? 3. Addressing human benefit <ul style="list-style-type: none"> • How does a researcher decide what research to do? • How does a research community decide what research to support/promote? • Policies and procedures for CMMR? • Are there models to draw on? • A proposal: X% of papers at next CMMR will have scored highly on social benefit assessment sub-committee to discuss, consult on, and agree criteria this would have benefit outside your discipline as well <p><i>Extended summary of main contributions to be included in roadmap</i></p>
Further details	<p>The panel video recording is available on MIREs YouTube Channel http://www.youtube.com/watch?v=HM9MHh4DAAM&feature=plcp</p>

4 CONCLUSION

During these first nine months of the MIREs project it was fundamental to interact with as many research communities as possible and with people from diverse communities that could give some input of relevance to the MIREs Roadmap. The activities reported in this deliverable have been instrumental in accomplishing that. We have basically organized 10 events in very diverse contexts from which we have been able to gather inputs from the three major communities of interest: research, industry, artistic.

The information gathered in these events has shaped the current draft version of the MIREs Roadmap, both in terms of its organization and of its specific content.

The next efforts in the project will focus on getting feedback on the current draft version of the Roadmap. Thus we will make efforts into involving the communities from which we have gathered the information, asking for feedback especially on the research challenges that we have identified. The organization of a session at ISMIR 2012 will be an important event in which we expect to get important feedback to the Roadmap.

ANNEX: MUSIC TECH FEST CONTRIBUTOR SUMMARIES BY STRO

4.1 Music Tech Fest distilled challenges

4.1.1 Collaboration among the wider music tech community

- * Better information and closer connection between the creative industries, the music industry, researchers and innovators: fostering collaboration between these communities
- * the opportunity for young digital composers/artists to work with top-class orchestras and recording environments

4.1.2 Multimodality

- * Multimodality has been mentioned by many contributors

Tangible, gestural and environmental interfaces

- * Tangible and gestural interfaces named as the most exciting challenge by panelists
- * immersive soundscaping (see extensive entry by Martyn Ware in the MTF Event Fiche)
 - the challenge of being torn between creating music performance technologies and playing them = without being the user the task of innovating would be impossible (see Alphasphere entry in the MTF Event Fiche)
- * the desire to turn ordinary objects into instruments
- * allowing musicians and performers to take full advantage of electronic music without losing the feeling of touching a real surface
- * developing music technologies to aid vocalists
- * Can we put data anywhere there is sound?
- * Can we enable new kinds of audio communication between simple devices, not just smartphones?

4.1.3 Research and education

- * Bridging the gap between music technology and music education
- * using hack days as starting points for explorations. The value of these ad hoc collaborations lies not in the work that is produced, but in the process of the collaboration itself. (see Vincent Akkermans entry in the MTF Event Fiche)
- * methods for fusing music analysis based research and creative music applications.
- * Can we go further still, and create new classes of audible machine language?

4.1.4 Licensing

- * Frustration by lack of pan-European music licensing for recorded music rights
- * how can good data reduce piracy and re-valorise the digital music product?
- * Rights holders need to find new revenue streams from their existing digital assets, especially where they are additive and non-cannibalizing to their other revenue channels.

4.1.5 The importance of data to industry

- * how much can good data lead to extra revenue for the record industry?
- * how can good data improve industry processes and reduce inefficiencies?
- * making the the recording industry start to understand the actual value of a piece of data to their business, both in reducing costs, increasing efficiencies and generating extra revenues
- * real-time data collection

4.1.6 The importance of engaging users

- * allowing users to engage and interact in a meaningful way with the research we produce.
- * Brand and media owners are trying to engage their audiences through music and empower them to become content creators around their brands.
- * Consumers are showing a greater propensity to want to interact with music rather than just listen to it.
- * now is a great time to be doing stuff because the tools are better, audiences are getting more into interactivity, and the possibilities are still limitless
- * Multi-user applications

4.2 3D HACK DAY

Music Tech Fest (18-19 May 2012) contributor summaries

The Music Tech Fest* gathered:

- 52 contributors
- 77 workshop participants
- 30 hackers
- over 10,000 users visited the website during May only
- the live streaming broadcast was seen by over 700 viewers from 40 countries
- the festival generated 830 minutes of video footage on each of the 3 cameras

***The Music Tech Fest started as a small-scale event, organised over a period of 3 months from start to finish**

KaleidoSound

Description

Kaliedosound is a music visualizer which transforms the light from LEDs into a kaleidoscopic visual which is synchronized to a synthesizer.

Creators

- Patrick O'Neill - inSilico - Soundcloud / tricktronix.com

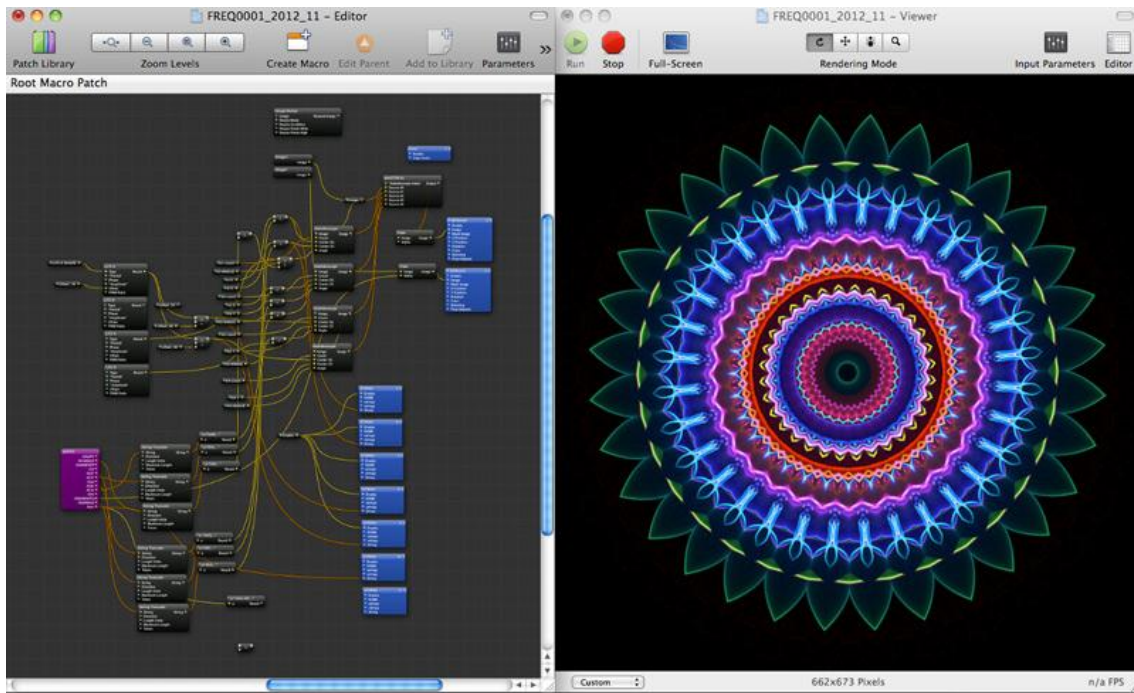
About the hack

An iPad with MidiTouch sends midi note data to Ableton to play a digital synthesizer and trigger midi clips with automation envelopes modulating VoidGrabber (MaxForLive), which sends OSC data to Quartz Composer to control parameters of kaleidoscopes.

Technology

- Quartz Composer
- Ableton Live
- Max for Live + VoidGrabber & Grabber Sender
- iPad + MidiTouch





Casio Hack

Description

We hacked into an old Casio synthesizer and did some circuit bending :-)

Creators

Patrick O'Neill Tricktronix

Nela Brown (QMUL, G.Hack) with Patricia and Kacper

<http://nelabrown.blogspot.co.uk/>

<http://ghack.eecs.qmul.ac.uk>

About the hack

Patrick brought in an old Casio which had some 80's piano/ organ / drum machine sounds as well as Rick Astley 's song Never Gonna Give You Up as demo (still going on in my head as I write ha ha ha ha). Kacper was working on his Touch Sensitive Hacked Echo Unit on the table next to us so we asked him what we should do with it. He gave us crocodile clips and told us to explore connecting different electronic parts until we find something interesting. We opened the synth and found the main board with 2 chips housing the sounds and some others controlling the octaves etc. We played around with crocodile clips to find where the sounds are coming from and rewired some of those points to contact mics (as we didn't have any switches) so these can be triggered. We tried to rewire to a switch we got from the light sabre but this was a bit 'temperamental' so decided to instead fire up Ableton Live Demo and record the output of the synth into the laptop, create some loops and make a composition. Patrick went back to work on his other hack KaleidoSound and Patricia came by to check out what was going so got spooled into 'performing' the synth whilst I was recording and than we swapped (performing=holding a piece of wire stripped at both ends and touching different parts of the board looking for interesting sounds and trying not to trip it up/blow the circuitry). We passed the loops through some Ableton presets (Reverbs etc.) and played that back to demo what sort of stuff you can get out of the synth (that manufacturers did not know about :-)









SocialGlitch

Description

Twitter controlled sequencer/sound and visuals generator. Not the most innovative idea, but it does generate some nice beats. It makes complex sounds and if you keep tweeting at it it sort of feels like music is evolving without ever changing too abruptly. Oh, and it also displays details of the last person who sent in a command for each track individually.

Creators

- Rimas Krivickas - LinkedIn

About the hack

1. Install and launch the app
2. enter a tag you want to use to control the playback ('s_glitch' by default)
3. Click 'OK'

4. Start tweeting commands following by targets like so (be a little patient, twitter isn't the fastest "remote control" in the world):

#s_glitch hit bass hit snare hit vox

...then maybe...

#s_glitch hit beat hit synth mix vox

...and then maybe...

#s_glitch end beat end bass end snare mix vox hit hihat

...well, you get the idea (I hope)...

there are only 3 commands:

- hit - launches a randomly generated loop
- end - self explanatory
- mix - regenerates a loop without stopping it's playback

There are 8 tracks to be played, each track holds multiple one shot samples:

- beat
- bass
- hihat
- snare
- synth
- perc
- vox
- fx

I doubt it will ever change the world :)

What APIs, tools, kits or other amenities did you use?

- Twitter
- Adobe Air
- Photoshop
- 4 x cans of RedBull + 3 x coffee
- Google (for images)
- Personal collection of non-pirate samples

Download

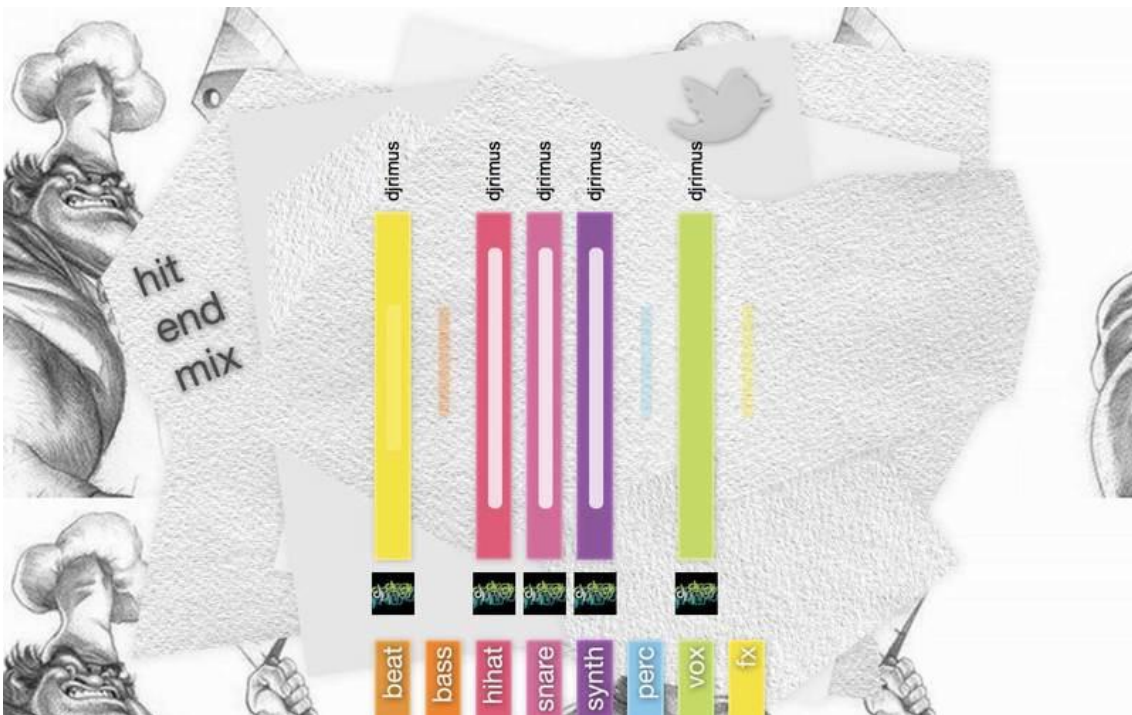
HERE

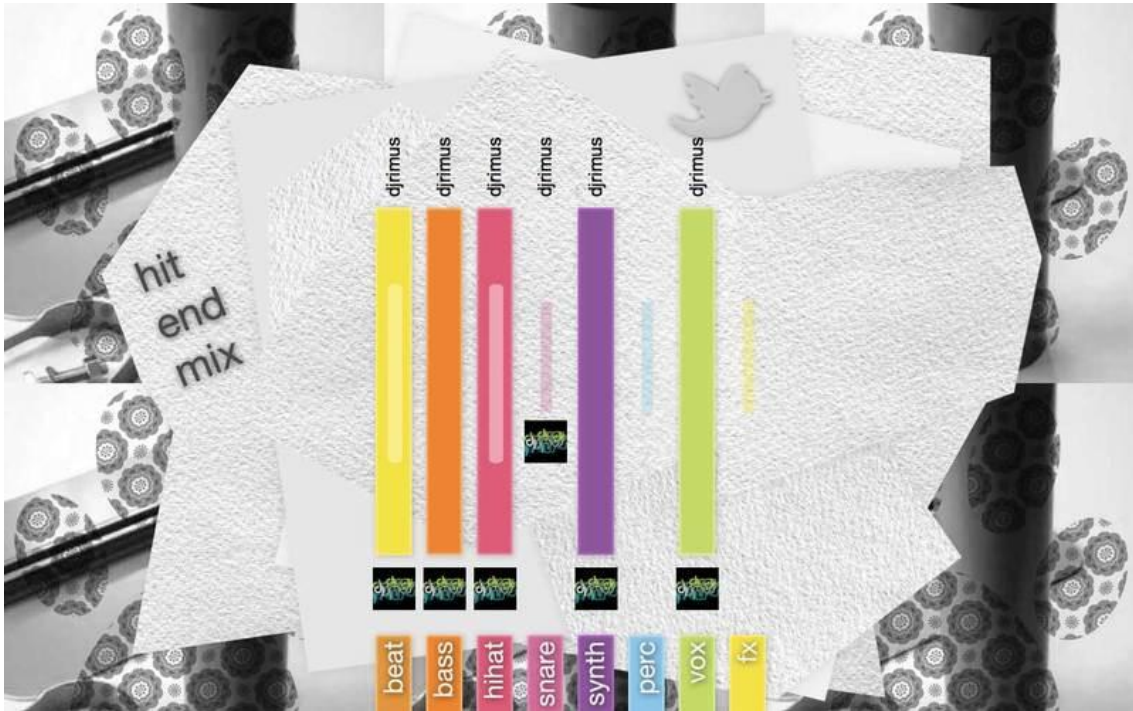
Source

HERE

Screenshots

Pic1 Pic2 Pic3





不格好5K

Description

不格好5K (Pronounced "bukkakō 5000") is a bass guitar that is equipped with additional position and pressure sensors to enable the control of additional expressive elements while playing.

Creator

Adam John Williams [1] [2]

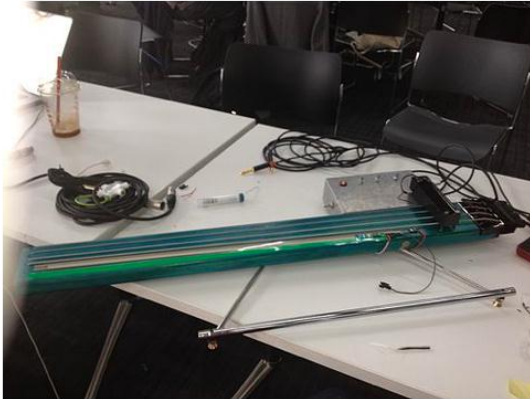
About the hack

I built the bass guitar in the two days before Music Hack Camp began, since I didn't want to go hacking apart any of my other instruments to attach the sensors until I was sure the idea would work. Currently I have it set up so that the thumb-activated pressure sensor controls the pitch and amplitude of the PFFT-based pitch shift effect in Max MSP, and the pressure sensor along the neck controls the amplitude and cutoff frequency of a low pass filtered sawtooth oscillator with the position of your finger controlling the pitch.

What APIs, tools, kits or other amenities did you use?

- Arduino
- Max MSP

Media



Screenshot





This Is My Chord

Description

This Is My Chord is an online repository for guitar chords, Github for guitar chords if you will. Shameless influence from thisismyjam.com

Creators

- Arthur Carabott - @acarabott / <http://www.codenotes.co.uk>

About the hack

This is a prototype for an online repository for guitar chords. This is github for guitarists. Chords are a nice little nugget of music to share, fork and learn from. For now it has chord playback via HTML5 and recall via historyState.

What APIs, tools, kits or other amenities did you use?

- HTML5 (audio and history)
- SoundManager2 [1]



Shinysillysaber

A shiny sound controller which looks like a saber.

Staff

Jordi Hidalgo Gomez

Hector Parra

Varun Jewalikar

Description

Now make some noise with your sabers. Move it to change the sounds. Hold it high up to start playing your favourite StarWars monologues. And it shines mysteriously while doing all this.

Technology

1. Dismantle saber
2. Put in an Arduino (controls all the i/o) and an accelerometer.
3. Send and receive data to and from the saber through ZigBee which connects via USB with the laptop.
4. Use pure data for processing everything on the computer and send OSC/MIDI to Ableton Live
5. Profit!

Photos











AutoVJ

Description

Web app that showcases how an automatic video dj tool can be created to help club managers to display videos related to the music currently playing, in an automatic fashion.

Creators

- Mohamed Sordo - @neomoha

What APIs, tools, kits or other amenities did you use?

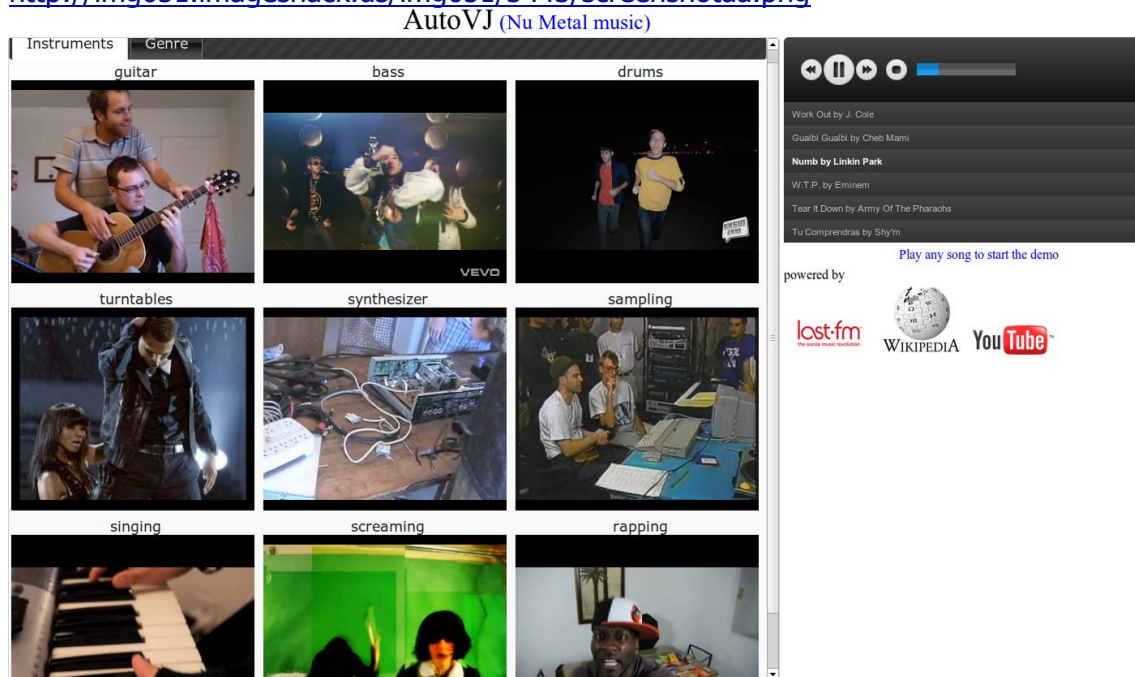
- Last.fm [1]: Get Tracks Top Tags from Last.fm, and then filter the tags to get the most representative Genre.
- Wikipedia [2]: From the Wikipedia Infobox, get the most typical instruments for the music genre selected in the previous step
- Youtube [3] [4]: Get the first youtube video related to each instrument.

Source code and links

<http://www.dtic.upf.edu/~msordo/autovj/>

Screenshot

<http://img651.imageshack.us/img651/3443/screenshotaa.png>



SoundscapeDJ

Description

We made a real-time Soundscape DJing program aimed to play environmental sounds from [Freesound.org] with a tangible interface. It is possible to retrieve your soundscapes and manipulate them by changing their rate and applying filters.

Creators

- Gerard Roma - [mtg.upf.edu/people/groma]
- Anna Xambó - [users.mct.open.ac.uk/ax22]

What APIs, tools, kits or other amenities did you use?

- [Freesound.org]: Freesound 2 API
- [SuperCollider]: Freesound2 Quark, SETO Quark
- [ReactIVision]

Media

Audio examples

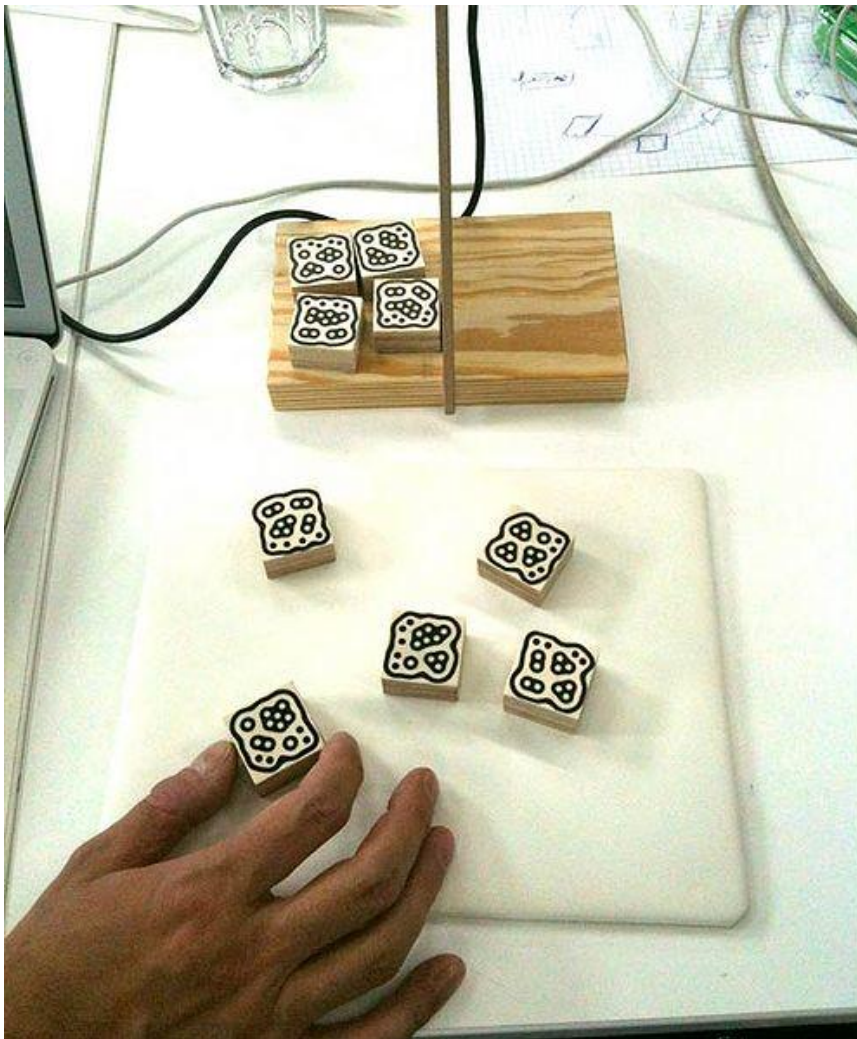
- Media:Squeaky.mp3

Freesound sounds used: "SqueakyDoor.wav" by acclivity: <http://www.freesound.org/people/acclivity/sounds/16394/>, "BerberFarmyard2.wav" by acclivity: <http://www.freesound.org/people/acclivity/sounds/18074/>, "SqueakyDoorNR.wav" by acclivity: <http://www.freesound.org/people/acclivity/sounds/16454/>

- Media:Crickets.mp3

Freesound sounds used: "Cricket Uxmal.wav" by reinsamba: <http://www.freesound.org/people/reinsamba/sounds/14853/>, "CountrySideSummerEvening.wav" by pcaeldries: <http://www.freesound.org/people/pcaeldries/sounds/23131/>, "Town or suburbs amb - summer night.WAV" by eric5335: <http://www.freesound.org/people/eric5335/sounds/52604/>

Tangible interface



Screenshot



DelHands

Description

Banging a table lets you play a marimba running on your iPhone. The rhythm you play to comes from your environment's sounds.

Creators

- Ariel Elkin - @AriVibes

About the hack

The environmental sounds around you are EQed and sent through an LFO. Vary the frequency of the LFO to get a rhythm you're comfortable with. Hold the device close to a surface you fancy doing percussion with. Hit the surface, the device recognises hits and turns them into marimba sounds. Control the marimba's frequency by tilting the device.

What APIs, tools, kits or other amenities did you use?

- The Synthesis Toolkit in C++
- MoMu Toolkit

Screenshot

Why the dog? The initial idea was to do modify the image according to the sound picked up by the device, and that image seemed appropriate. Image-processing eventually got aborted, but I didn't have the heart to let Bowie the dog go. The brown eye is the marimba, the blue eye is the reverb.



TapOrShake

Description

Smartphone app for get music recommendation by tapping or shaking your mobile.

Creators

- Xavi Francisco - @srxavi
- Pau Capella - @paucm
- Sara Gozalo - @sara_sgm

What APIs, tools, kits or other amenities did you use?

- Ella BMAT API
- PhoneGap



TripPong

A musically augmented ping pong table!

Staff

Sebastian Mealla Frederic Font

Description

Have you ever dreamed of playing ping pong while listening to your favourite music? Everyone can do that with a ping pong table and a portable audio device, but with TripPong the experience goes way beyond this! In TripPong, music follows the game, if you don't play well, music punishes you and will sound wierd. Moreover, TripPong features an amazing set of inspiring sound effects that will make your game unique. TripPong is DA HACK!

Technology

- Piezoelectric sensors => arduino => serial port => pure data (to capture the ball hitting the table) - Laptop camera => open cv for processing => pure data (for tracking the ball while in the air) - Pure data (trigger sounds, process music) Sound FX have been downloaded from freesound:

S: feebleefforts.wav by james duckett -- <http://www.freesound.org/people/james%20duckett/sounds/55082/>

S: pac man.flac by Corsica_S -- http://www.freesound.org/people/Corsica_S/sounds/30049/

S: retro game jingle.aif by mattwasser -- <http://www.freesound.org/people/mattwasser/sounds/58920/>

S: small crowd yelling 'YEAH'.wav by Tomlija -- <http://www.freesound.org/people/Tomlija/sounds/99636/>

S: oh_yeah.wav by Corsica_S -- http://www.freesound.org/people/Corsica_S/sounds/95238/

S: Acid wave.wav by Sangita -- <http://www.freesound.org/people/Sangita/sounds/13255/>

S: Chip054.wav by HardPCM -- <http://www.freesound.org/people/HardPCM/sounds/32954/>

S: LaserRocket.wav by EcoDTR -- <http://www.freesound.org/people/EcoDTR/sounds/36846/>

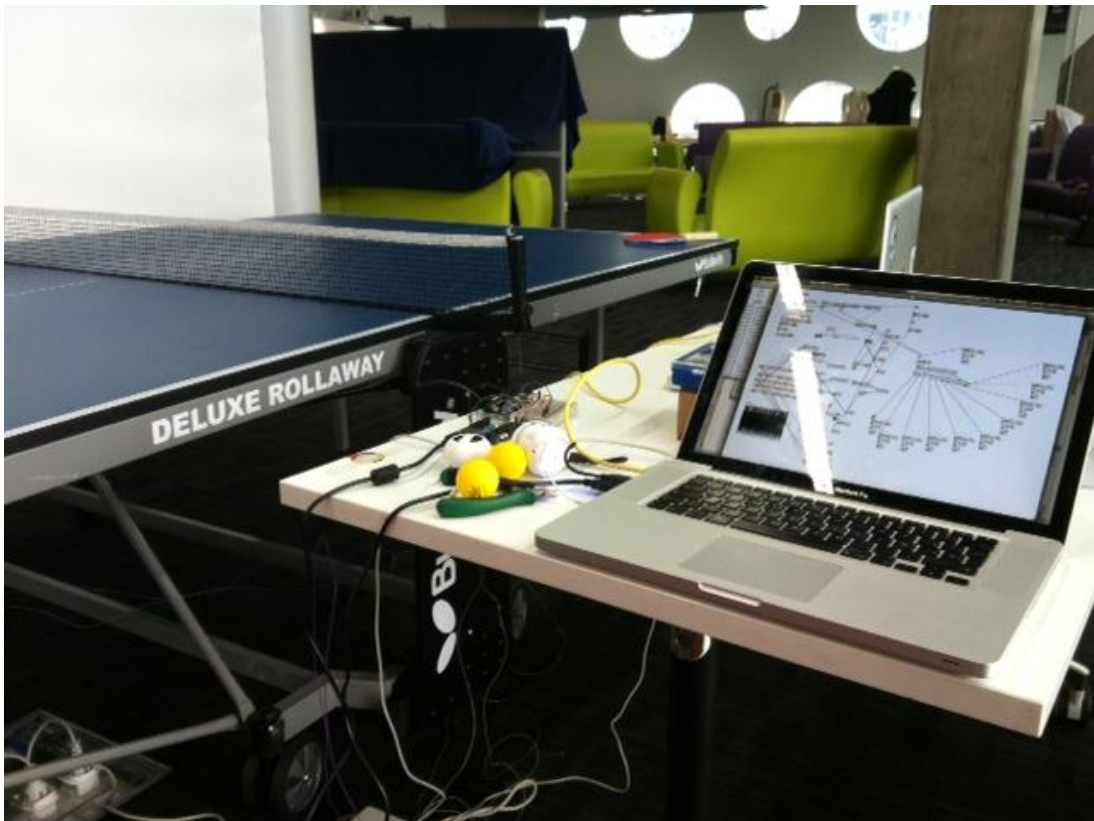
S: BOMB.WAV by sleep -- <http://www.freesound.org/people/sleep/sounds/925/>

S: LaserRocket2.wav by EcoDTR -- <http://www.freesound.org/people/EcoDTR/sounds/36847/>

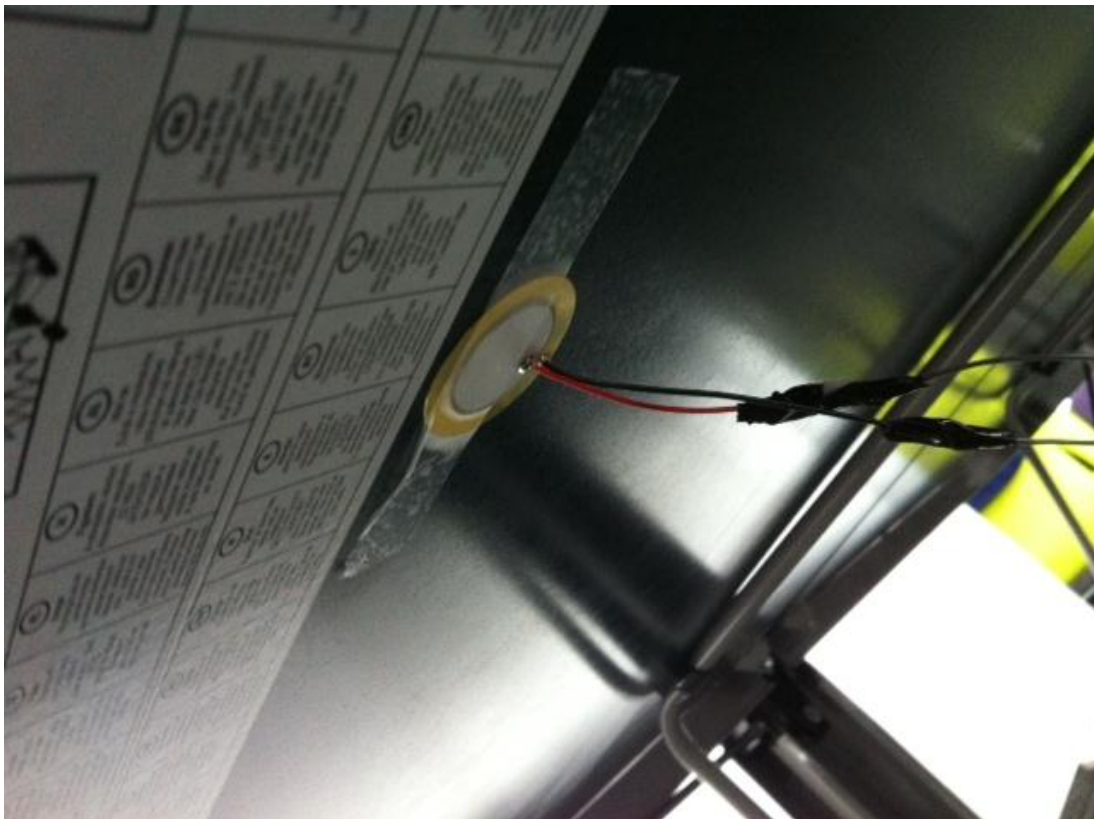
S: rocketexpl.wav by nthompson -- <http://www.freesound.org/people/nthompson/sounds/47252/>

Pics

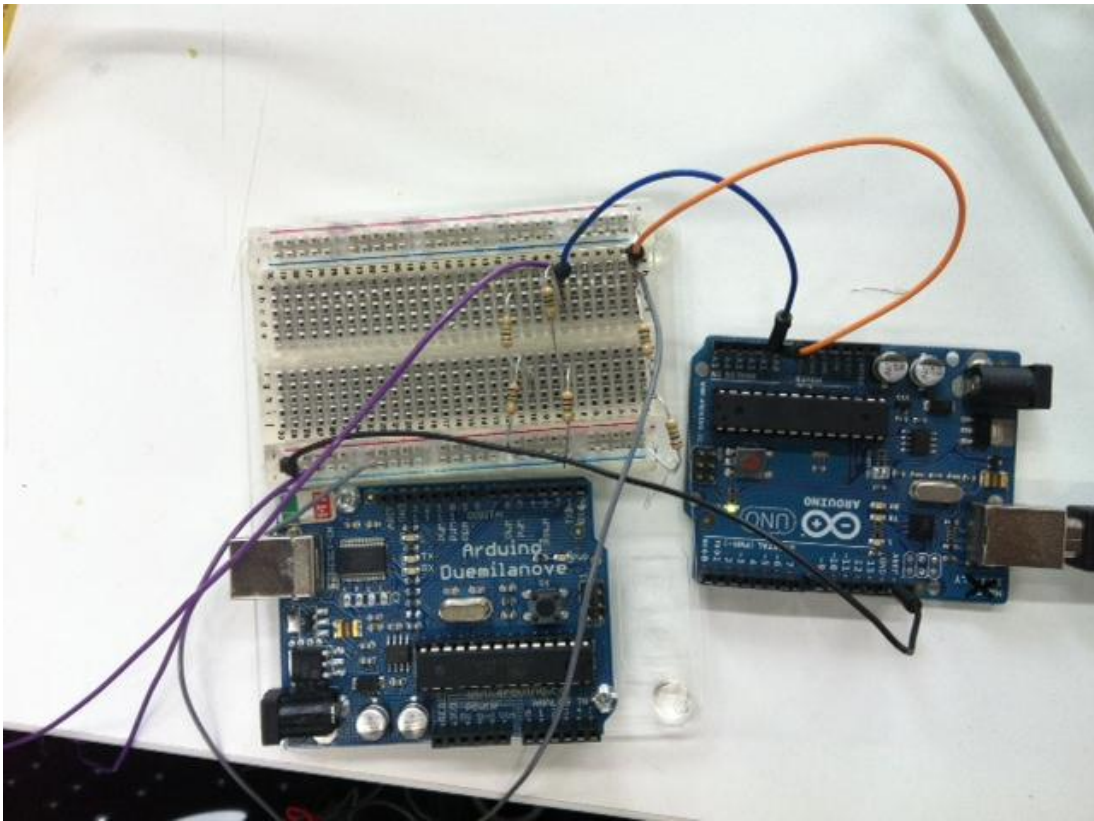
Picture 1



Picture 2



Picture 3



Picture 4



shaker++

Description

What we've all been waiting for. A system for bringing the lowly shaker into the 21st century.

Creators

- Yann Seznec - @amazingrolo / theamazingrolo.net

About the hack

Arriving at the hack day this morning I found a blue shaker. I thus made a system that uses a webcam to track color and generate sound from that color. By playing the shaker in front of the camera it will trigger and modulate either a sampler or an FM synth, based on the location and distance of the shaker in relation to the camera. It's fun! And ridiculous. It lets you create all sorts of crazy sounds based on a very simple input.

What APIs, tools, kits or other amenities did you use?

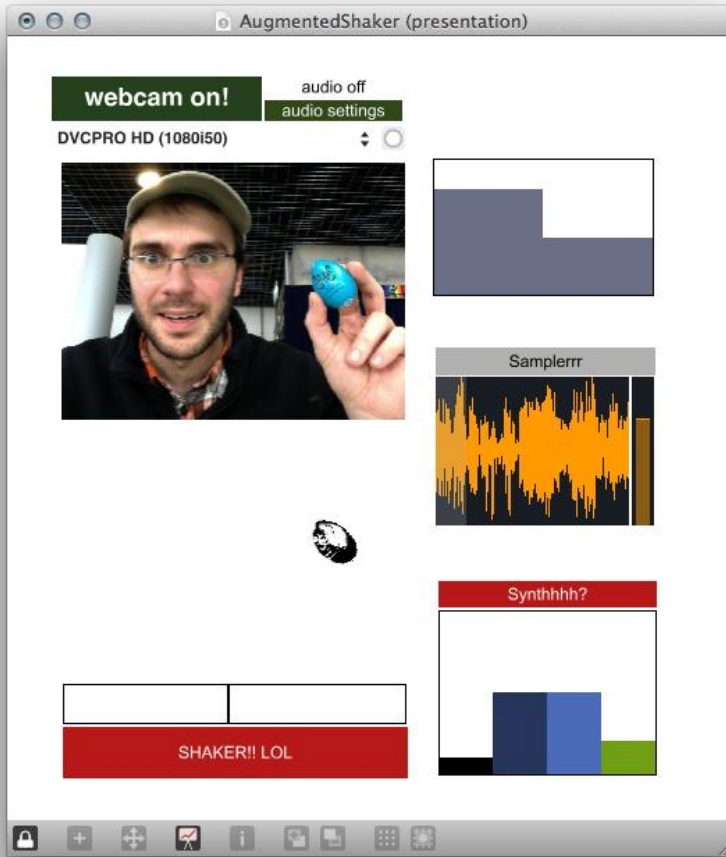
- Max/MSP/Jitter
- cv.jit library
- a shaker (blue)

Source code and links

I'll upload the patches soon...

Screenshot

screenshot...





Ce n'est pas un dictateur

Description

Charlie Chaplin's final speech in "The Great Dictator" is an extraordinary performance; using face tracking we wanted to mask the emotions with pop culture icons, then cartoon-like characters. We also used the voice amplitude, stress and face features tracking as MIDI input in order to overlay the discourse with instruments, again to see how it will influence the perception of the message.

Creators

- Laurian Gridinoc - @gridinoc / namebound.com
- Arran Ross-Paterson - @arranrp / eventhandler.co.uk
- Alex Roche - @Zenmaster13
- Mikolaj Banasik - @D1SoveR

About the hack

We processed one of the Charlie Chaplin's final speech in "The Great Dictator" videos available on YouTube with Adobe AfterEffects (scaling, sharpen, timecode insertion, cue mark/cigarette burns synchronization).

The video was played as coming from a camera (via CamTwist OS X app), processed via FaceOSC that sent the events to our Processing application.

The face detection events were serialized on disk and replayed later directly on the video (using cue mark/cigarette burns we embedded in the video).

At this point we parallelized the work, Alex replayed the events in order to construct the MIDI output. Arran and me were replaying them to add shapes to the face tracking points.

Demo video: [1]

Old work in progress video: [2]

What APIs, tools, kits or other amenities did you use?

- FaceOSC
- Processing and various libraries: MIDI bus, oscP5, ddf for Fast Fourier Transform
- Adobe AfterEffects and Illustrator (SVG editing)
- git as safety net (local versioning)

Source code and links

<https://github.com/laurian/PasUnDictateur> (TODO, need SSH access which is not available through the current network)

Screenshot

Face recognition points

Smiley mask

Hello Kitty mask

Laughing Man (Ghost in the Shell SAC)

V (V for Vendetta) mask; also Anonymous, Occupy MusicTechFest, etc.

Dictator animated character

Alex (A Clockwork Orange) animated character





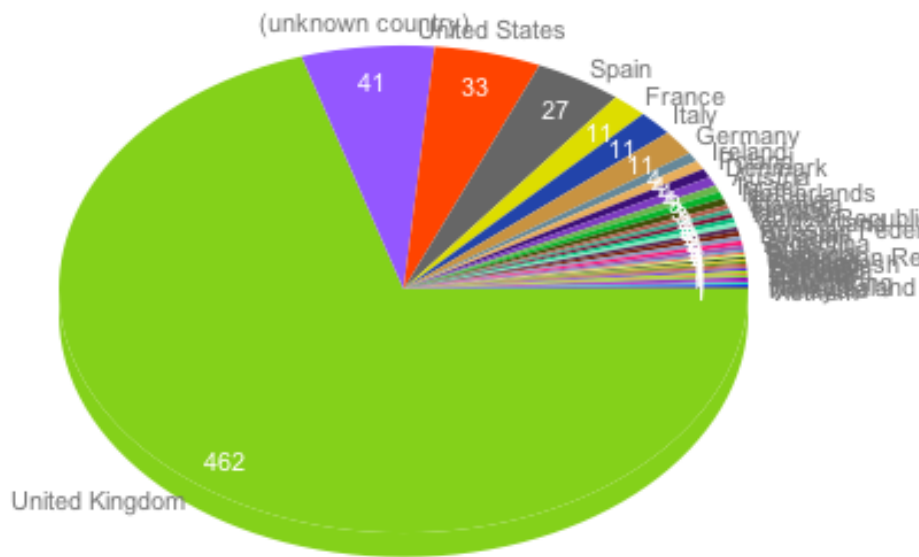






musictechfest.org LIVE STREAMING

Visitors per Country



Plays Per Countries

Country	Visitors
United Kingdom	462
(unknown country)	41
United States	33
Spain	27
Germany	11
France	11
Italy	11
Ireland	4
Denmark	4
Poland	4
Austria	4

Croatia	3
Israel	3
Netherlands	3
Belgium	2
Argentina	2
Sweden	2
Chile	2
Finland	2
Slovenia	2
Czech Republic	2
Norway	2
Switzerland	2
Russian Federation	2
Ukraine	1
Hong Kong	1
Taiwan	1
New Zealand	1
Malaysia	1
Vietnam	1
Bulgaria	1
Dominican Republic	1
Portugal	1
Bangladesh	1
India	1
Thailand	1
Australia	1
Greece	1
Colombia	1
Canada	1
Estonia	1