5 The Thing About Listening is…
Brona Martin

Fixed-media Sound
The idea for this piece began in July 2012 when I attended the Global Composition Conference in Dieburg, Germany. I went on a soundwalk with Hildergard Westerkamp and came away feeling very lucky to know and understand what a soundwalk was. I decided to organise a soundwalk in my hometown. The idea was to teach people a little about soundwalking and how to listen to their environment. I took about 15 people on this 50 minute walk and the group ranged from about 3-65 years of age. My interaction with the local community and the creation of the soundwalk had a significance influence on the locations of my recordings and the compositional process. The Thing About Listening is…..brings together thoughts, experiences, stories and sounds that were discussed and recorded as a result of the soundwalk. I would like to thank Rosemary Porter and Brian Johnson for allowing me to record our conversation about listening and using it in the piece.

Bio
Brona Martin is an Electroacoustic composer and sound artist from Banagher, Co. Offaly, Ireland. Brona started her PhD in September 2010 under the supervision of Professor David Berezan at NOVARS Research Center, University of Manchester. Her research interests include narrative in Electroacoustic music, soundscape composition and acoustic ecology. Her site specific works composed in stereo, 5.1 and 8 channel have included the creative exploration of soundscapes from Ireland, Manchester, West Coast Australia, Spain and Germany. Her works have been performed internationally at EMS, ACMC, ICMC, NYCEMF, ISSTA, NOISEFLOOR, Balance/Unbalance, SSSP, iFIMPaC and MANTIS.

6 kernel_panic
Jerod Sommerfeldt

Fixed-media Sound
"kernel_panic" is a fixed-media work that explores the use digital audio artifacts as musical material: The byproducts of aliasing, quantization noise, and clipping are liberated to the forefront of the composition process. Tiny grains of nearly inaudible sounds collide and mix with one another in a sonic collage that follows a trajectory from quietude to loud fervor.

Bio
Jerod Sommerfeldt's music focuses on the creation of algorithmic and stochastic processes, utilizing the results for both fixed and real-time composition and improvisation. His sound world explores digital audio artifacts and the destruction of technology, resulting in work that questions the dichotomy between the intended and unintentional. An active performer as both soloist and collaborator in interactive digital music and live video, he is Assistant Professor of Electronic Music Composition and Theory at the State University of New York at Potsdam Crane School of Music and director of the SUNY-Potsdam Electronic Music Studios (PoEMS).

7 Locust Wrath Epilogue
PerMagnus Lindborg

Fixed-media Sound
This piece is a binaural version of the surround sound for the epilogue of "Locust Wrath", a dance and multimedia performance directed and choreographed by Angela Leong, danced by ArtsFission, with set design and music by Joyce Beetuan Koh, and sonifications by PerMagnus Lindborg. It was presented in Singapore, 27–28 September 2013. The sonifications were made from data provided by the Tropical and Marine Science Institute, NUS. The "Epilogue" expresses the predicted weather in South-East Asia in the years between 2080 and 2099, a not-so-distant future. The data are played by a virtual ensemble of 18 'harps' with 352 strings in total. A plucked-string synthesis model produces sounds reminiscent of biwa, guzheng, lyre, or pipa. If there is rainfall in one geographic area on a certain day, then one specific string will be played at the corresponding time in the piece. If it is a hot day, the string will ring longer. The higher the atmospheric pressure, the more detuned it will be. Humidity is mapped to vibrato depth. The wind speed affects the quality of the plectrum that plucks the string, so that stronger wind gives a sharper tone. Sonification compresses time. The climate is rendered as a music whose form — gesture, timbre, intensity, harmony, spatiality — is determined by the data.

Bio
Composer, sound artist and researcher PerMagnus Lindborg is assistant professor at ADM/NTU, Singapore and member of the Society of Norwegian Composers. He obtained degrees in composition and music computing from Oslo (Music Academy) and Paris (IRCAM, Paris-4). His compositions, interactive sound installations, and performances have been presented in more than 20 countries. Research interests include soundscape perception, semantic spaces, and multimodal experience design.

www.permagnus.net

8 NanoBalad
Roland Cahen

Fixed-media Sound
Did you know that Music has its own body?
Music is an immaterial invisible, untouchable, furtive body. The promise of spatialization is not only to immerse the listener in moving sounds; it is the embodiment of music. It is to sense the body of music resonating with ours. As the music is composed of relations of continuities and differences between sounds, kinetic music consists of relationships between spatial sound figures, identity, contrasts and variations. In other words, we are witnessing the birth of a musical language of space. Similar to choreography, kinetic music has an open-ended, plural and fluid body. Its structure is made up of varying masses, rhythmic topophony and temporal space. Nano is a ride, a walk in the clouds, une balade. Not far from a ballad; epic or gently balancing music, but at the time of nanos — the grammar already zapped one L. Nan (= Not a number, computer invalid operation). If numbers soon become material and in real time, what will happen when there is a bug? NanoBalad music is a venomous and monumental music, a non-judgemental vision, a poignant questioning about the present and the future. Commissioned by and composed in the INA/GRM studios in 2012.

Bio
After studying with Pierre Schaeffer and Guy Reibel at the Paris Conservatory (1977—1980), Cahen co-founded the class in electroacoustic music of Amiens (1983), and the Workshop in Sound Design at NHS Montbéliard (1993) and finally the Studio Sound at the Ecole Nationale Supérieure de Création Industrielle. He composes for stage, concert, multimedia and interactive installation, develops original sound forms in the field of spatial sound distribution. His writes books of 'ludo-pedagogical' character as well as articles on sound design, music, and interactive contemporary music research.

Artwork Exhibition

1 DIRTI
Matthieu Savary, Denis Pellerin,
Florence Massin (UserStudio) & Diemo Schwarz

Interactive Multimedia
Create music and graphic animation with expressive gestures, mold sonic landscapes by plowing through the granular interaction material of the DIRTI tangible interface! Dirty Tangible Interfaces (DIRTI) are a new concept in interface design that forgoes the dogma of repeatability in favor of a richer and more complex experience, constantly evolving, never reversible, and infinitely modifiable. We built a prototype interface realizing the DIRTI principles based on low-cost commodity hardware and kitchenware: A video camera tracks a granular or liquid interaction material placed in a glass dish. The 3D relief estimated from the images, and the dynamic changes applied to it by the user(s), are used for expressive audio–graphic music performance, both the relief and real-time changes are interpreted as activation profiles to drive corpus-based concatenative sound synthesis, allowing one or more musicians to mold sonic landscapes and to plow through them in an inherently collaborative, expressive, and dynamic experience.

Bio
This project was made by the designers Matthieu Savary, Denis Pellerin, and Florence Massin from UserStudio, with the help of researcher Diemo Schwarz and the work of the IMTR (Real-Time Music Interaction) team at Ircam, sound designer Roland Cahen, composer Éric Broitmann from Motus, the early help of Romain Pascal, the support of Christian Jacquemin, and the French National Research Agency funded research project Topophonie.

2 Playing the Archive
Candice Ng & Studio|Lab

Interactive Multimedia
Playing the Archive is a project that presents nine different archives of sonification that consists of scientific data as well as historical and artistic data. Working closely with renowned percussionist Robyn Schulkowsky, Joey Baron and music technologist Mark Ballora, Studio|Lab's core research group collaborated closely with them to experiment with both digital and live sonification, visualization and materialization of data into new aesthetic forms. The hypothesis is that the interplay among musicians, visual artists, and data analysts - working together to simultaneously perform and display the archive in multiple formats and media — will enrich and shape the ways researchers render and engage information.

Bio
Studio|Lab is a research initiative at Penn State University that emerged from the idea that arts and science are complementary. The initiative provides space and opportunity for undergraduate students, graduate students, and faculty to fuse their creative and experimental impulses into ideas in a wide range of fields. In its most literal sense, Studio|Lab is a "studio" for scientists to refine the aesthetic dimensions of their work, and a "laboratory" for artists to test the performance and impact of their work. Brought together, we attempt to contribute to the powerful nexus of creativity and empirical inquiry from which innovation emerges.

3 A Journey Beyond the Event Horizon
Julius Bucsis

Interactive Multimedia
"A Journey Beyond the Event Horizon" is a computer based installation that provides an interactive audio and visual experience to participants. The piece functions by having participants interact (through the use of the mouse) with the user interface objects on the computer screen. The piece depicts an imaginary crossing of the event horizon of a black hole. Current scientific understanding does not provide a clear description of what takes place beyond the event horizon of these objects. The piece therefore presents an interactive aural and visual voyage into the unknown.

Bio
Julius Bucsis is an award winning composer, guitarist, and music technologist. His compositions have been included in many juried concerts, conferences, and festivals worldwide. He also frequently performs a set of original compositions featuring electric guitar and computer generated sounds. His artistic interests include using computer technology in music composition and developing musical forms that incorporate improvisation.

4 iSiD
Siddhant Yadav

Sound Installation
The iSiD installation is a prototype, investigating systems for interactive interior sound design. The larger exploration is on interactivity and dynamism of interior acoustic spaces of being. The intention is to provide an acoustic palette of sounds to work with towards the composition of interior sound designs, provide an acoustic freedom by providing for a participation in deciding what is heard how in the physical space, freeing from what is being imposed upon the architecture and explore, if the same physical space can wear different acoustic clothes.

Bio
Siddhant is a graduate from the Department of Design at Indian Institute of Technology Guwahati, India. His explorations are spread into Art, Design, Media, BCI, Human-nonHuman Interaction, Ecological Sustainability and Activism.

kysiddhant.wix.com/wpfv2