

smc18

sonic crossings

15th Sound & Music Computing Conference

Sonic Crossings

📅 4-7 July

📍 Limassol, Cyprus



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Wednesday 4/7				Thursday 5/7								
	CUT Amphitheatre	Rialto Theater	Stoa Laniti	NAC	CUT Amphitheatre	Old Vinegar Factory	Stoa Laniti	NAC				
09:00	Welcome Reception / Registration				Paper Session III: Spatial Sound and Architectural Acoustics <i>chair: Areti Andreopoulou</i> Simulating the Acoustic Environment of Two Historical Viennese Theaters, Brandon Westergaard, Timothy Hsu A new implementation of Spat in Max. Thibaut Carpentier Navigate as a Bat. Real-Time Echolocation System in Virtual Reality. Anastassia Andreasen, Jelisaveta Zovnercuka, Kristians Konovalovs, Michele Geronazzo, Stefania Serafin, Razvan Paisa Interactive Exploration of Musical Space with Parametric t-SNE. Matteo Lionello, Hendrik Purwins, Luca Pietrogrande, Mohamed Abou-Zleikha							
10:20	Welcome Speech				Coffee Break							
10:40	Paper Session I: Sound and Music Perception <i>chair: Federico Avanzini</i> Perception of Mechanical Sounds Inherent to Expressive Gestures of a NAO Robot - Implications for Movement Sonification of Humanoids. Emma Frid, Roberto Bresin, Simon Alexandersson Stream Segregation: Utilizing Harmonic Variance in Auditory Graphs. Joe Fitzpatrick, Flathni Neff CrestMusePEDB 2nd EDITION: MUSIC PERFORMANCE DATABASE WITH PHRASE INFORMATION. Mitsuyo Hashida, Eita Nakamura, Haruhiro Katayose Crossing Phrase Boundaries in Music. Zuzana Cenkerova, Martin Hartmann, Petri Toivainen Perceiving Agent Collaborative Sonic Exploration in Interactive Reinforcement Learning. Hugo Scurto, Frédéric Bevilacqua, Baptiste Caramiaux		Listening Room & Installations	Installations	Paper Session IV: Auditory display <i>chair: Thibaut Carpentier</i> You Are Here: Sonic Crossings and Time Indeterminacy within the Buffer Zone. Oswaldo Emiddio Vasquez Hadjilyra An Xception Residual Recurrent Neural Network for Audio Event Detection and Tagging. Tomas Gajarsky, Hendrik Purwins #nowplaying-RS: A New Benchmark Dataset for Building Context-Aware Music Recommender Systems. Asmita Poddar, Eva Zangerle, Yi-Hsuan Yang Toward a Web of Audio Things. Benjamin Matuszewski, Frédéric Bevilacqua		Listening Room & Installations	Installations				
12:30	Poster Craze: Session I All participants of poster Session I					Poster Craze: Session II All participants of poster Session II						
12:45	Lunch					Lunch						
12:45	Poster Session I					Poster Session II						
	Evidence of Lateralization Cues in Grand and Upright Piano Sounds. Federico Fontana, Federico Avanzini, Stefano Papetti Virtual Reality Exploration with Different Head-Related Transfer Functions. Erik Sikström, Michele Geronazzo, Jari Kleimola, Federico Avanzini, Amalia de Götzen, Stefania Serafin A system for spatial audio using synchronized mobile devices. Jan-Torsten Milde Time lapse video sonification: watching and listening to events unfolding. Xenofon Karakostas, Konstantinos Bakogiannis, George Cambourakis, Anastasia Georgaki Evoking Places from Spaces: The application of Multimodal Narrative Techniques in the Creation of "U-Modified". Gareth W. Young, Siobhán Mannion, Sara Wentworth Towards Creating an Augmented Handpan using Leap Motion. Christine Steinmeier, Dominic Becking Inside the intimate zone: The case of aural micro-space in multichannel compositional practice. Nikos Stavropoulos AIMA. Artificial Intelligence for Music and Art. Robert Lisek, Robert Lisek Teaching Programming in Secondary Education through Sound. Theofani Sklirou, Areti Andreopoulou, Anastasia Georgaki NordicSMC: a Nordic University Hub on Sound and Music Computing. Stefania Serafin, Sofia Dahl, Roberto Bresin, Alexander Refsum Jensenius, Runar Unnthorsson, Vesa Valimäki Electroacoustic music composition in the Music School of Nicosia. Nasia Therapontos, Dimitrios Savva				Analyzing and Classifying Guitarists from Rock Guitar Solo Tablature. Orchisama Das, Blair Kaneshiro, Tom Collins Recreating an Instrument inspired by the Glass Harmonica using Fabrication Techniques and Physical Models. Razvan Paisa, Stefania Serafin Encoding Byzantine Music Notation (Ca. 1600-1814). Nick Bounis, Achilles Chalidzeakes, Anastasia Georgaki Makam Recognition Using Extended Pitch Distribution Features and Multi-Layer Perceptrons. Furkan Yesiler, Baris Bozkurt, Xavier Serra Formalizing Schoenberg's Fundamentals of Musical Composition through Petri Nets. Adriano Baratè, Davide Andrea Mauro, Goffredo Haus, Luca Andrea Ludovico A Heuristic Algorithm for DJ Cue Point Estimation. Diemo Schwarz, Daniel Schindler, Severino Spadavecchia A Simple Fusion of Deep and Shallow Learning for Acoustic Scene Classification. Eduardo Fonseca, Rong Gong, Xavier Serra Relative DTW Embedding for Binary Classification of Audio Data. Marcelo Queiroz, Guilherme Jun Yoshimura A Maximum Likelihood Model for the Harmonic Analysis of Symbolic Music. Martin Rohmeier, Timothy O'Donnell, Colin Atken Training Deep Convolutional Networks with Unlimited Synthesis of Musical Examples for Multiple Instrument Recognition. Rameel Sethi, Noah Weninger, Abram Hindle, Vadim Bulitko, Michael Frishkopf Soundscape Emotion Recognition via Deep Learning. Jianyu Fan, Fred Tung, William Li, Philippe Pasquier Quantitative Analysis of the Impact of Mixing on Perceived Emotion of Soundscape Recordings. Jianyu Fan, Miles Thorogood, Kivanc Tatar, Philippe Pasquier							
14:00												
15:00	KEYNOTE TREVORT WISHART "Human Speech and Music : different perspectives"					KEYNOTE REBECCA FIEBRINK "Machine learning and human creativity"						
16:30	Coffee Break / SMC Board Meeting @Lecture Room 1					Coffee Break						
17:00	Paper Session II: Applications in audio and music <i>chair: Marcelo Queiroz</i> Microphone-based Electronic Wind Instrument by Feature Extraction From Breath Signals. Francesco Bigoni, Pelle Juul Christensen, Rasmus Eklund, Javier Molina Garcia, Cumhur Erkut From my Pen to your Ears: Automatic Production of Radio Plays from Unstructured Story Text. Emmanouil Theofanis Chourdakis, Joshua D. Reiss				Listening Room & Installations	Installations			Paper Session V: Design and control of new interfaces <i>chair: Stefania Serafin</i> Design and Interaction of 3D Virtual Music Instruments for STEAM Education Using Web Technologies. Kosmas Kritsis, Aggelos Gkiokas, Quentin Lamerand, Robert Piéchaud, Carlos Acosta, Maximos Kaliakatsos-Papakostas, Vassilis Katsouras Stability, Reliability, Compatibility: Reviewing 40 Years of DMI Design. John Sullivan, Marcelo M. Wanderley Real-time Bowed String Feature Extraction for Performance Applications. Kurijn Buys, Andrew McPherson Dervish Sound Dress: a Development of a Musical Interface Garment which explores Wearable Technology using Sound and Haptic Feedback for Performance and Interaction. Eduardo Miranda, Hedy Hurban, Edward Braund Deployment of LSTM for Real-Time Hand Gesture Interaction of 3D Virtual Music Instruments with a Leap Motion Sensor. Kosmas Kritsis, Aggelos Gkiokas, Maximos Kaliakatsos-Papakostas, Vassilis Katsouras, Aggelos Pikrakis An Expressive Multidimensional Physical Modelling Percussion Instrument. Ohej Zabetian, Pablo Delgado, Sofia Dahl, Stefania Serafin	CONCERT PARTS 4 & 5	Listening Room & Installations	Installations
17:30	Improving the Instrumental Learning Experience through Complexity Management. Laurel Pardue, Andrew McPherson, Dan Overholt Fiddl: Evaluation of a Smartphone Based Application Designed for a Music Workshop for Children. Gergely Csapo, Jonas Hoffelt, Peter Bruun, Stefania Serafin	CONCERT PART 1										
18:30	A Portable Impulse Response Measurement System. Elliot K. Canfield-Dafilou, Eoin Callery, Christopher Jette Acquisition of Violin Instrumental Gestures Using an Infrared Depth Camera. Zacharias Vamvakousis, Alfonso Perez Carrillo, Rafael Ramirez	Break										
19:00		CONCERT PART 2										
20:00		Break										
20:30		CONCERT PART 3										
21:30					Conference Banquet							

Friday 6/7				Saturday 7/7						
CUT Amphitheatre		Rialto Theater	Stoa Laniti	NAC	CUT Amphitheatre	Stoa Laniti	NAC			
09:00	Paper Session VI: Machine Learning for music applications <i>chair: Jean Bresson</i> A Machine Learning Approach to Violin Vibrato Modelling in Audio Performances and a Didactic Application for Mobile Devices. Matteo Lionello, Rafael Ramirez A comparative study on filtering and classification of bird songs. Nicolas Figueiredo, Felipe Felix, Carolina Brum Medeiros, Marcelo Queiroz A Machine Learning Approach to Classification of Phonation Modes in Singing. Furkan Yesiler, Rafael Ramirez AI Encountering Interactive Systems: A Deep Learning Reinforced Musical Composition Model. Ke Ma, Tian Xia				Paper Session IX: Interactive Performance <i>chair: Panayiotis Kokoras</i> Metric Interweaving in Networked Dance and Music Performance. Ioannis Zannos, Martin Carlé The BodyHarp: Designing the Intersection Between the Instrument and the Body. Doga Buse Cavdir, Romain Michon, Ge Wang Sonic Crossings with Audience Participation: The Embodied iSound Performance. Marcelo Gimenes HamoKara: A System for Practice of Backing Vocals for Karaoke. Mina Shirashi, Kozue Ogasawara, Tetsuro Kitahara					
10:20	Coffee Break				Coffee Break					
10:40	Paper Session VII: Computational Musicology <i>chair: Anastasia Georgaki</i> Modeling Carnatic Rhythm Generation: a Data Driven Approach Based on Rhythmic Analysis. Carlos Guedes, Konstantinos Trochidis, Akshay Anantapadmanabhan Affordances of Vibrational Excitation for Music Composition and Performance. Tychonas Michailidis, Jason Hockman Approaches and Assessment of Drama Prosodic Tools in Live Performance. George Petras, Panagiotis Tsagkarakis, Anastasia Georgaki Nawba Recognition for Arab-andalusian Music Using Templates From Music Scores. Niccolò Pretto, Barış Bozkurt, Rafael Caro Repetto, Xavier Serra		Listening Room & Installations	Installations	Paper Session X: Sound Synthesis and Signal Processing <i>chair: Athanasia Zlatintsi</i> 3D Printing and Physical Modeling of Musical Instruments: Casting the Net. Romain Michon, John Granzow Sonoids: Interactive Sound Synthesis Driven by Emergent Social Behaviour in the Sonic Domain. Andreas Apergis, Andreas Floros, Maximos Kalikatsos-Papakostas Towards Flexible Audio Processing. Thilo Koch, Marcelo Queiroz Strumming on an Acoustic Nylon Guitar: Microtiming, Beat Control and Rhythmic Expression in Three Different Accompaniment Patterns. Sérgio Freire, Augusto Armondes, João Viana, Rubens Silva	Listening Room & Installations	Installations			
12:30	Poster Craze: Session III All participants of poster Session III									
12:45	Lunch									
12:45	Poster Session III Blender2faust: from drawn 3d objects to physically based sound models. Stefania Serafin, Romain Michon, Smilen Dimitrov A Collaborative System for Composing Music via Motion Using a Kinect Sensor and Skeletal Data. Christos Garoutis, Athanasia Zlatintsi, Petros Maragos Block-based Scheduling Through Interrupts And Intervention. Bjarni Gunnarsson SketchyTuna: Exploring A Design For Screenless Creativity. Nikolaj Møller, Dan Overholt, Vanessa Carpenter, Antonio Stella, Baldur Kampmann, Martin Minovski, Martin Maunsbach Haptic Interaction with Guitar and Bass Virtual Strings. Andrea Passalenti, Federico Fontana UPISketch : The Renewal of an Old Idea. Rodolphe Bourotte Frequency Control of Nonlinear Oscillators – Strategies for Realtime Sound Synthesis. Martin Neukom Algorithms for Guitar-Driven Synthesis: Application to an Augmented Guitar. Fabián Esqueda, Otso Lähdeoja, Vesa Valimäki Ko2 - Distributed Music Systems With O2 and Kronos. Vesa Norilo, Roger Dannenberg A Pattern System for Sound Processes. Hanns Holger Rutz Speaker Drum. Juan Sierra Data Transmission as Musical Performance. Simon Blackmore									
14:00										
15:00	KEYNOTE CLAUDE CADOZ "Concepts and Technologies for Multisensory and interactive simulation of physical objects. Application to Helios, a musical and visual artwork for the Helicanthe Platform of the ACROE"									
16:30	Coffee Break									
17:00	Paper Session VIII: Computational Models for Composition and Performance <i>chair: Ioannis Zannos</i> Strune – an Interactive Audio-visual Installation Inspired by String Theory. Davor Vincze, Hrvoje Hiršl, Jonathan Abel GTM Database and Manual Time-span Tree Generation Tool. Masatoshi Hamanaka, Keiji Hirata, Satoshi Tojo	IRCAM Workshop (Lecture Room 1) Music Composition & Creative Interaction with Machine Learning								
17:30	CTcomposer: A Music Composition Interface Considering Intra-Composer Consistency and Musical Typicality. Hiromi Nakamura, Tomoyasu Nakano, Satoru Fukayama, Masataka Goto Mapping Pitch Classes And Sound Objects: A Bridge Between Klumpenhouwer Networks And Schaeffer's TARTYP. Israel Neuman				CONCERT PART 6					
18:30	Unit-generator Graph as a Generator of Lazily Evaluated Audio-vector Trees. Hiroki Nishino				Break					
19:00			CONCERT PART 7							
20:00		Break								
20:30		CONCERT PART 8								
21:30										
					Oral Presentations Venue: Tassos Papadopoulos Building, Amphitheatre I - Themidos and Ifigenias Corner, Limassol 3036. Old Vinegar Factory: 34 Genethliou Mitella Street, Limassol 3036. Rialto Theatre: Andrea Drousioti 19, Limassol 3040. NeMe Arts Centre: Ellados and Enoseos Corner, Limassol 3041.					