



















### ICLC2020 International Conference on Live Coding

THU 6th 2020 University of Limerick - Ireland

# Evening Concerts

Thursday 6th of February 2020 19:30 Theater 1 Irish World Academy UL

# eCossystem

Char Stiles

Robotics Institute at Carnegie Mellon University

Danielle Rager

Center for the Neural Basis of Cognition

arsonist (Danielle Rager) and Char Stiles live code audio and visuals to create a simulated ecosystem using cellular automata. The flux of the ecosystem is reflective of the ability to dynamically alter rules when live coding. The simulated ecosystem's state feeds back to alter the music and the visuals, leading to the genesis and destruction of synthesized life forms and their sounds. Starting with a Shepard tone and a sunrise, the performance begins. It builds to a crescendo as this world driven by an alternation of Stephan Rafler's smooth life in GLSL. There is an appearance of Primordial Particle Systems, as well as reaction diffusion algorithms throughout the performance. The rules of these systems are conducted by the sounds from arsonist. There is a narrative of creation and deterioration into chaos. Inside of this structured ecosystem waves of natural and synthesized sounds disturb and

govern the digital landscape.eCosystem explores how live coding can enable a musician and visualist to perform and improvise based upon a symbiotic relationship through the medium of simple rules with emergent behaviors.

#### Bio

Char Stiles is a researcher and digital artist. Using computational systems and algorithms she is producing pieces that spans disciplines such as video, dance, interactive installation, performance and online works. Right now she is at the Robotics Institute at Carnegie Mellon University as a research associate. She has received awards from the Carnegie Museum of Art, exhibited internationally and talked and gave workshops at Carnegie Mellon University, Massachusetts Institute of Technology and New York University. Her portfolio is CharStiles.com.arsonist is the solo musical project of Pittsburgh native, classically-trained violinist and producer

Danielle Rager. Collaging raucous electronics, manipulated vocals, and her mother-tongue of lush string arrangements, arsonist has kindled organic, texture-rich digital soundscapes in live performances across the US. The audio/visual set that arsonist recently performed at the Mattress Factory with digital artist Char Stiles incorporates intricate, flexible sequencing of beats and found sounds with the live coding environment Tidal Cycles, marrying her music with the algorithmic nature of her daytime work as a Department of Energy Graduate Fellow in Carnegie Mellon University's Program for Neural Computation. Rager is also a member of the improvisatory, electroacoustic duo Diaphony and the DJ duo The New Hip Tiki Scene, winners of Secret Thirteen's 2017 New Blood mix competition.

# CTRL+Z

Zeshan WangKinetic

Imaging/Computer Science Virginia Commonwealth University

This performance is simply a simulated interaction between programmer and programme. Using TidalCycles, the program will compose as the want but a concurrently running Python script will be running and attempting to play its own composition. This can be seen as a more benign version of previouswork (CTRL-Z) where the script would be constantly closing the composition window to impede the programmer's process.

#### Bio

Zeshan Wang is a motion and 3D artist interested in the relationship between how people represent themselves physically and digitally. They are currently a student at Virginia Commonwealth University majoring in Kinetic Imaging and Computer Science.

# Improvisation

Experiments in hexadecimal beats, event-rate oscillators, bit shifts, and modulus processing.

#### Bio

Steven Yiisa composer, performer, programmer, and Tai Chi practitioner. He is a developer of Csound and author of various computer music programs including Blue, Pink, Score, and csound-live-code. He is an Assistant Professor at the Rochester Institute of Technology in the School of Interactive Games and Media.

Steven Yi

Rochester Institute of Technology

#### INFERNO

The Amazon fires have captured the attention of the world, and for good reasons: the destruction of one of the world major carbon stores, considered as "the lungs of the world", could strike a devastating blow to the fight against the climate change, and to the home of indigenous communities. Amazon fires increased by 84% compared to the same period last year, according to the satellite images by the Brazilian National Institute for Space Research.

Yet, cattle ranching, logging and the production of soybeans was not only the plague for the deforestation in the Amazon Rainforest, but it affects other parts of the world, like the Cerrado (one of the world's most biodiverse regions), which is 50% deforested, or the Rainforest in Indonesia. Still, is not everything: the biggest number of fires, in the month of August was in Russia, followed by the Democratic Republic of the Congo and

Giovanni Muzio (Kesson)

Brazil, according to the satellite images of NASA and VIIRS INFERNO is a dramatic journey through the blazes around the globe to raise awareness about forest fires, not only in the Amazon but, for many reasons, across the globe. An audiovisual performance coded live, fetching both archived and real time data of the fires around the world from NASA database and their Near Real Time API. The performance is coded in the Processing environment, in REPL/Hot Swap mode, it includes some customizations (GLSL shaders, data fetching algorithms...) and it communicates on the fly with Max/MSP and Ableton Live for the sounds and music.

Bio

Giovanni Muzio (kesson) is an artist and researcher, graduated in New Media Arts. In his work he defines time as an abstract dimension, where matter is created and evolves continuously in imaginary landscapes. He works mostly with algorithms, mathematical formulas, in the intersection of order and chaos. The unpredictability of randomness and fortuity is mixed with the order and aesthetics of maths, in a combination that leads to poetic hallucinations. His aesthetics is minimal nevertheless it is also inspired by the uncanny quality of complexity, synthesized in geometric shapes with few colours, lines of lights, real data converted in abstract geometries, inspired by the cyberpunk and Sci-Fi imaginary.

# Autobiographical Improvisation on 4 Channels

An autobiographical performance based on found sounds, some of which have accompanied me since my early childhood, some of which have been recorded during the recent years. Using granular sampling, the sounds are stretched and extended, the time information is altered if not removed, and the sounds turn into a potentially end-The Mégra (https:// less texture. github.com/the-drunk-coder/megra) system and its simple life modeling algorithm generate subtle, if not subliminal, variations. The performer is given time and space to listen, select and layer the sounds in an improvisational manner, melting down a lifetime into a continously evolving stream of sound. Interaction is calm and reduced. The multichannel setup creates additional acoustic space to listen to, distribute and get lost in the sound, adding spatial wideness to the impression of timelessness.

#### Bio

Niklas Reppel (\*1983, Witten a.d. Ruhr, Germany) is a live coder and audio software developer currently based in Barcelona. Oftentimes he is more involved in making live coding tools than actually using them. Coming from a multifaceted musical background that features everything from jammy rock bands to contemporary chamber music ensembles, improvisation and eclecticism play a major role in his current live coding works. For more information, see:https://parkellipsen.de

## Cibo V2

Jeremy Stewart

Rensselaer Polytechnic Institute

Shawn Lawson

Rensselaer Polytechnic Institute

The Proposal is for Cibo V2, a machine learning agent, to perform solo. This version of the Cibo V2 agent is vastly different with multiple changes to the deep neural network structure, performers contributed learning data sets, additions to the visual representation of how the agent manipulates code. Updates to agent architecture are outlined in our technical paper submission.

#### Bio

Shawn Lawson is an artist researching the computational sublime. He performs under the pseudonym Obi-Wan Codenobi.

Jeremy Stewart is a multimedia artist and performer researching the affective potential of distributed media systems through the creation of improvisational performances, artificial intelligence (A.I.) software, and wearable hardware. Cibo V2 is the second iteration of their machine learning agent that live-codes TidalCycles solo. The training set for this performance comes from blind elephants, kindohm, and bgold; Jeremy Stewart, Mike Hodnick, and Ben Gold respectively.

# Perang Gagal: a Series of Inconclusive Battles

Dr J Simon van der Walt Royal Conservatoire of Scotland with Prof. Mel Mercier and students of the Irish World Academy of Music and Dance - University of Limerick

This performance juxtaposes livecoded 'gamelan' music created in SuperCollider with music played live on real gamelan instruments. The title refers to a traditional set-piece scene from the Javanese wayang kulit shadow-play repertoire. Taken literally, this scene represents a series of skirmishes between characters from opposing armies, none of whom emerge clearly victorious. Metaphorically it might be taken to represent a transition between youth, as represented by the first pathet nemscene, to the middle age of pathet sångå, while in contemporary performance it is an entertaining crowd pleaser that allows the dhalang puppeteer to show off his skill in manipulating the puppets. In this performance, the puppet battles will be imaginary, and there is no attempt to mimic the particular series of srepeg and sampak musical forms that accompany this scene. Our intention is rather to capture the lively and rambunctious atmosphere, while perhaps hinting at the challenges and tensions inherent in combing performance by live instrumentalists with livecoded music.

#### Bio

Dr J Simon van der Waltis Glasgow-based composer and performing artist. Over the course of his career has created a varied and original body of work, ranging from score-based composition to installation, sound art, performance, and devised musik theater. His chief current preoccupations are Indonesian gamelan music, livecoding, and reconstructing thecareer of his fictional alter ego Edward 'Teddy' Edwards, unsung hero of British light music electronica. He is Head of MMus Programmes at the Royal Conservatoire of Scotland.

Professor and Chair of Performing Arts at the Irish World Academy of Music and Dance, University of Limerick, since 2016, Professor Mel Mercier was formerly Associate Professor of Music and inaugural Head of the School of Music and Theatre at University College Cork. He is a traditional percussionist, composer and educator, with an international reputation as an innovative performer, rooted in Irish traditional music and committed to collaborating across music genres and art forms. A renowned, award-winning composer, he has composed the music for many critically acclaimed, award-winning theatre productions and installations that have been presented at theatres and venues in Ireland, UK, Europe and America, Awards include: Irish Times Theatre Award for Best Soundscape for the Gare St Lazare production of Beckett's How It Is -Part I(2018): Irish Times Theatre Award for Best Soundscape for the Corcadorca production of Caryl Churchill's Far Away(2017); the Gradam Cheoil Awardfor Collaboration on CONCERT with Colin Dunne and Sinead Rushe (TG4, 2018); the New York Festival Bronze Medal Awardfor his radio documentary, Peadar Mercier(RTÉ Doc on One, 2017); theNew York Drama Desk Awardand Tony Awardnomination for his sound score for Colm Tóibín's Testament of

Mary(Broadway 2012); and a nomination for an Irish Times Theatre Award for the Abbey Theatre/Fibín production of Paul Mercier's Sétanta. In 2002, he was nominated for a Drama Desk Award for the Abbey Theatre/Broadway production of Medea