SZAKMAI ÖNÉLETRAJZ

Dr Baracskai Zlatko www.zlatko.hu

Felsőfokú tanulmányok

BA in Sonolgy (2005) Royal Conservatoire, The Hague, Netherlands. PhD in Composition (2011) University of Birmingham, UK.

Nyelvismeret

Annyanyelvi szint: Angol, Szerb-horvát, Holland és Magyar

Társalgási szint: Spanyol és Német

Egyetemi oktatás

30.5.2008-máig - University of Pécs

- Audio Synthesis and Analysis I & II SuperCollider, audio synthesis, digital signal processing
- Psychoacoustics Pitch, time and loudness perception, hearing tests, experiment design and excecution.
- Acoustics Studio and venue acoustics.
- Generative Beats Strategic deployment of randomisation to produce EDM grooves.

01.09.2013-máig - University of the West of England in Bristol

- Audio Technology Studio technology, electro-acoustic transducers, mixing, production.
- Instrument Recording Investigation Instrument Acoustics, recording
- Applied Audio Systems Max/MSP programming, generative music and audio, user interface design, field recording, soundscape composition.
- Audio Process Design and Implementation C++ programming, audio signal processing, VST programming, sound synthesis, digital audio effects.
- Architectural Acoustics Room and concert hall acoustics, studio design, architectural consultancy, psychoacoustics.
- Advanced Performance and Composition Computer aided composition, algorithmic sequencing, digital instrument design, musical performance.
- Research Methods in Music Technology Objective testing, subversive research.
- Music Portfolio Sequencing, club tracks, production.
- MSc Dissertation Supervision of individual theses for the completion of Masters in Creative Technologies.

1.9.2022-máig – NEUSOFT Academy, Foshan, China.

• Research and Academic Skills

25.09.2021-01.06.2022 - Széchenyi István University Győr

• Doctoral programme in Business Administration with Transdisciplinary Approach - Complex Systems, boolean networks, machine learning, cognitive systems, chaos.

1.9.2020-máig - Hong Kong School for Higher and Professional Education

- Audio-Visual Production
- Interaction Design Engagement, interfaces, playfulness, learning curves.
- Ethics and Professional Issues Embodied cognition, consequentialism, cyberethics, privacy.

1.9.2020-1.6.2022 - Music Academy of Belgrade

- Studio Technology Signal processing and audio synthesis.
- Psychoacoustics Physiology, JNDs, localisation, auditory scene analysis.
- Acoustics Studio and venue acoustics.

30.10.2010-1.6.2017 - Music Academy of Sarajevo

• Algorithmic Composition – SuperCollider programming, pattern transformations, combinatorics, generative algorithms, fractal self-similarity, randomness.

1.10.2021-1.2.2022 - Bath Spa University

• Foundations of Audio Processing – PureData, filtering, delays, non-linearities, dynamics processing, granulation, auditory scene analysis, beat slicing.

01.10.2014-01.05.2021 - UWE Centre for Music

- Turntablism Course Manual vinyl manipulation as a musical instrument.
- NoiseLab Experimental audio and music production.
- School of Modular Analogue modular synthesis, audio electronics, experimental music, chaotic feedback circuits.
- School of Controllerism Ableton Max for Live programming, dance music performance, musical stem manipulation, interface scripting.

17.1.2010-30.5.2011 - Birmingham Conservatoire

- Performing with Technology Composing for digital instruments, live processing, interface design, digital virtuosity.
- Technique of Electronic Music Audio synthesis and processing, tape music.

4.2.2008-15.9.2013 - Birmingham City University

- Sound Synthesis and Sequencing Oscillations, waveforms, additive and subtractive synthesis, physical modelling, granular synthesis, generative sequencing.
- Digital Audio Effects Filtering, dynamics processing, pitch and frequency manipulation, spatial audio, adaptive effects.
- Interactive Music Systems Generative algorithms, interface design, digital musical instruments, algorithmic composition.

Irományok

Neil Phillips, Samuel W. Remedios, Anna Nikolaidou, Zlatko Baracskai, Andrew Adamatzky (2023) No ultrasounds detected from fungi when dehydrated, *Ultrasonics.*

Baracskai, Z. (2022) Conventional Non-computing and Unconventional Musical Signal Processing. In: Adamatzky, A., ed. (2022) *Unconventional Computing, Arts, Philosophy.*

Baracskai, Z. (2021) Triggering Models For Effortful Musical Interaction Beyond Direct Cognitive Control. Proceedings of the International Computer Music Conference.

Baracskai, Z. (2021) Let-act: Challenges of Collaborative Multimedia Performances. Proceedings of the International Computer Music Conference, ICMC

Baracskai, Z., Sumarac, M., Saulig, N. (2020) Unconventional Audio Signal Processing: Aloe Vera Summing and Panning. 5th International Conference on Smart and Sustainable Technologies, SpliTech.

Saulig, N., Lerga, J., Baracskai, Z., Dakovic, M. (2019) Adaptive thresholding in extracting useful information from noisy time-frequency distributions. International Symposium on Image and Signal Processing and Analysis, ISPA.

Baracskai, Z. (2019) DANN: Digital Audio Neural Network. 4th International. Conference on Smart and Sustainable Technologies, SpliTech

Baracskai, Z. (2014) Algorithmic cross-mixing and rhythmic derangement. $40^{\rm th}$ International Computer Music Conference, ICMC.

Enderby, S., Baracskai, Z. and Athwal, C. (2013) Methods for Real Time Harmonic Excitation of Acoustic Signals. 10th Sound and Music Computing Conference. Baracskai, Z., Finn, S. (2013) Relaxation effects of binaural phenomena. Proceedings of the AES International Conference

Enderby, S., Baracskai, Z. (2012) Harmonic instability of digital soft clipping algorithms. Proceedings of the International Conference on Digital Audio Effects, DAFx.

Jan Trützschler von Falkenstein, J., Baracskai, Z., (2011) A Graphical User Interface for Supercollider Audio Units. 37th International Computer Music Conference, ICMC.

Baracskai, Z., Stables, R. (2010) Algorithms for digital subharmonic distortion. 128th Audio Engineering Society Convention.

Egyéb tanítás

- 15-.16.2022 Sarajevo Music Academy Algorithmic Composition Seminar
- 27.5.2022 Novi Sad Music Academy 26.5 Modular Processing Seminar
- 17.6.2021 Kismaros Subidubee Odd-meter Workshop
- 5.10.2020 Ljubljana Osmoza Live Coding Workshop in SuperCollider
- 5-6.9.2020 Budapest ASS VCV Rack Course
- 29-10.8.2020 Budapest ASS VCV Rack Course
- 12.10.2019 Budapest ASS Algorithmic Sequencing Course
- 4.4.2018 Sarajevo Music Academy Chaotic Algorithms in Composition
- 7.2-16.3.2018 Bristol Elevator Sound School of Modular
- 13-17.6.2016 Ellend Super Collider Course
- 25.11.2013 Sarajevo Music Academy Lecture on Live Processing
- 26.04.2013 London Music Tech Fest Waves to Soothe your Brains Presentation
- 28-30.10.2010 Sarajevo Music in Society Symposium.
- 30.3.2010 Amsterdam De Badcuyp Instrument Extension with Max4Live Workshop
- 22.12.2009 Digital Music Research Network London QMUL Max 4 Live framework has been presented with the focus on adaptive effects implementations.
- 16.5.2009 Two Thousand + Nine symposium on performance technologies at SARC Belfast. The paper entitled "Customized Extensions for Instrumentalists" was presented.
- 25.3.2009 DMU@BEAST Presentation on automated segment analysis and rephrasing algorithms.
- 24.6.2006 Dartington College of Arts The Extended Shakuhachi. a lecture on sensor interfaces and digital sound processing.
- 2005-2007 Kisknuhalas Courses funded by the European Grundtvig/Comenius fund for adult learning in the education sector. The course ran on annual basis and was majorly concerned with education technology, knowledge structuring and transfer.
- 13.5.2004 Royal Conservatoire in The Hague Sound synthesis framework based on recursive geometrical transformations.

Művészi rezidenciák

- 11-13.8.2022 Bistrica ob Sotli Improcon Cymbalist Performances
- 28.9-18.10.2020 Ljubljana Osmoza Musical Collaboration Residency
- 4-9.3.2019 Beograd Radio 3 Electronic Studio EMS Synthi 100 Residency
- 20.6-1.7.2018 Den Haag Studio LOOS Interactive Dance Residency
- 6-11.8.2016 Berlin Universität der Künste Disturbulence 3 Residency
- 11.5-20.6.2010 Bodrum Cura Bodrum Tactical Media Residency.