

ERIC GUIZZO

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Publications: https://www.researchgate.net/profile/Eric_Guizzo/publications

EXPERIENCE

Machine Learning Consultant

Alpha Health

📅 Dec 2018 – Sept 2019 📍 Barcelona, Spain

- Development of deep-learning-based speech emotion recognition algorithms.
- Development of an API to facilitate audio-based deep learning research with PyTorch and Keras backend.

Lecturer

Teatro delle Voci

📅 Mar 2017 – Sept 2017 📍 Treviso, Italy

- Real-time and offline audio synthesis and processing techniques
- Python, Max Msp, Ableton Live

Research Collaborator

AGON

📅 Jan 2016 – Jan 2017 📍 Milan, Italy

- Development of a Max-Msp application concerning 3D graphical design of physical modeled resonators

Live Sound Engineer

Mattorosso

📅 Jan 2014 – Jan 2015 📍 Montebelluna, Italy

- Mixing and recording of live gigs
- Managing lights show during the exhibitions

Sound Artist

TIF Museum

📅 Sept 2012 – Apr 2013 📍 Crocetta del Montello, Italy

- Development of a permanent multimedia audio installation
- Programming and implementation of a musical interactive software

Sound Engineer

Self-Employed

📅 2010 – Present 📍 Treviso, Italy

- Development of audio synthesis and processing software
- Audio recording, mixing, post-production and mastering
- Sound Design for video media

ABOUT ME

My expertise lies mainly in the fields of Sound and Music Computing, Sound Engineering and Applied Data Science. I am particularly fascinated by the intersection of Deep Learning and Audio Synthesis and Processing techniques. My current academic research focuses on the algorithmic modeling of the human emotional response to sound perception and on perceptual complex audio features disentanglement. On the other hand, my personal interests go beyond a mere scientific application of Artificial Intelligence. In fact, alongside this I am exploring the potential of Deep Learning in creative contexts related to Sound Art. This engages me in constant experimentation, applying novel paradigms of human-machine interaction and “intelligent” sound synthesis.

COMPETENCES

Machine/Deep Learning

Signal Processing

Computer Vision

Audio Software Design

Sound Synthesis, Processing

Electronic Music Composition

Sound Design

Multimedia Arts

Digital Audio Restoration

Critical Listening

Audio Recording, Mixing, Mastering

PROGRAMMING SKILLS

Scientific Python



Pytorch, Keras, Numpy, Scipy



Unix



Apache Spark



COMPUTER MUSIC SKILLS

Max Msp / Pure Data



Ableton Live / Pro Tools



Izotope RX



Supercollider



EDUCATION

MPhil/PhD in Computer Science

City, University of London

📅 Oct 2018 – Present 📍 London, UK

Supervisors: Tillman Weyde, Giacomo Tarroni

- Machine Learning for audio applications
 - Perceptual audio features disentanglement
 - Emotion recognition from audio speech signals
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Master's Degree in Sound and Music Computing

Conservatorio C. Pollini

📅 Sept 2013 – May 2014 📍 Padua, Italy

- Advanced Sound Synthesis and Signal Processing
- Multimedia Arts
- Sound enhancement and restoration
- Electroacoustic Music Composition

110/110 cum laude

Certificate in Sound Design

SAE Institute

📅 Sept 2015 – May 2018 📍 Milan, Italy

Bachelor's Degree in Electronic Music and Sound Engineering

Conservatorio C. Pollini

📅 Oct 2008 – May 2013 📍 Padua, Italy

105/110

ARTISTIC CREDITS

Personal exhibition of the sound installation *Chorder*

Errant Sounds Gallery

📅 Nov 2019 📍 Berlin, Germany

Personal exhibition of the audio-visual installation *Typo*

Fabbrica del Vapore

📅 Nov 2017 📍 Milan, Italy

Played with Rehie Laptop Ensemble Giorgio Sancristoforo's *Constellations*

AGON

📅 Dec 2016 📍 Milan, Italy

Personal exposition of the Audio-visual installation *All in Family*

Palazzo Malipiero

📅 Jan 2016 📍 Venice, Italy

PUBLICATIONS

- *Anti-Transfer Learning for Task Invariance in Convolutional Neural Networks for Speech Processing*, currently under review.
- *Multi-Time-Scale Convolution for Emotion Recognition from Audio Speech Signals*, IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2020
- *Towards a Multimodal Time-Based Empathy Prediction System*, IEEE International Conference of Automatic Face and Gesture Recognition, 2019. This paper won the OMG-Empathy challenge 2018.
- *A Neural Network Based Framework for Archetypical Sound Synthesis*, accepted at the International Conference of New Interfaces for Musical Expression (NIME), 2018

REFERENCES

- Tillman Weyde: T.E.Weyde@city.ac.uk
- Alberto Novello: jestern77@yahoo.it
- Giorgio Sancristoforo: gio@giorgiosancristoforo.net