Nöörjen teknihkeleseatnemedaejremes universiteete

What is Music Technology?

Dr Balandino Di Donato balandino.didonato@leicester.ac.uk





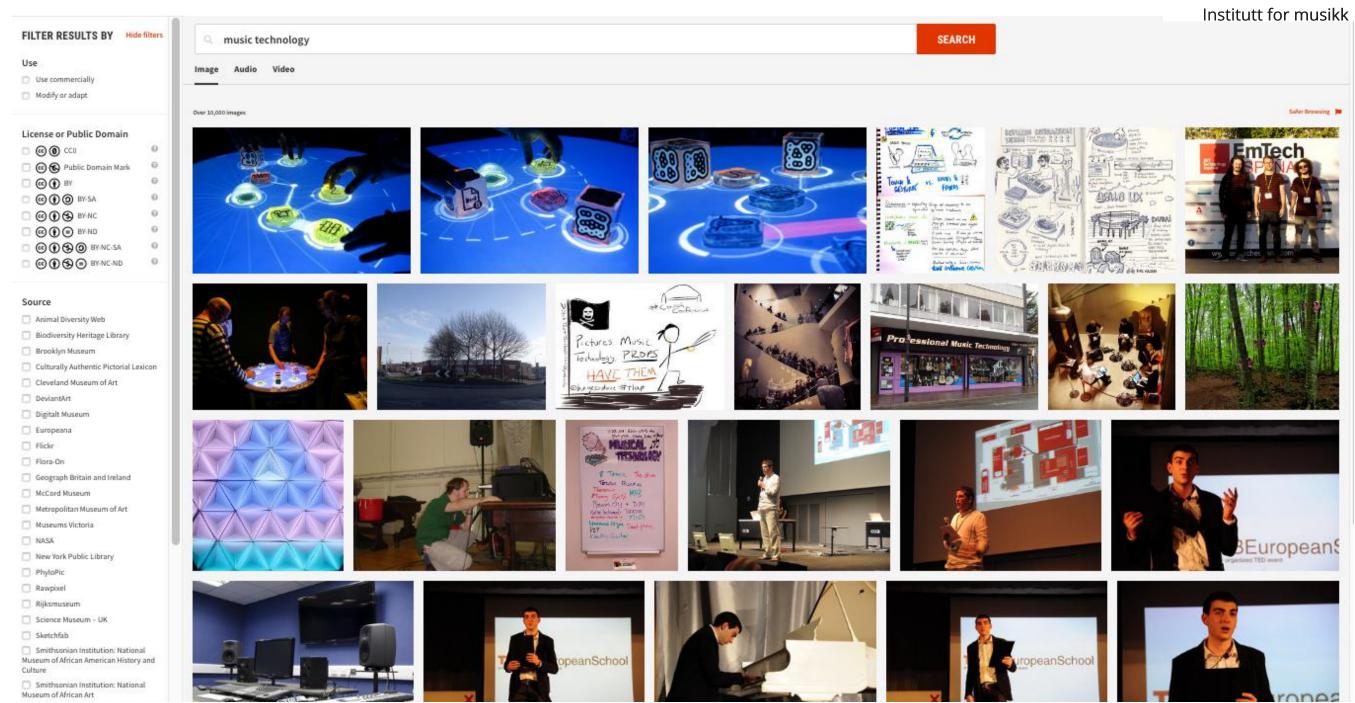


Image source: https://search.creativecommons.org/search?q=music%20technology







Tools















■ News



Images



Shopping

▶ Videos



: More





Settings











electronic >



Music, Technology and Innovation MA dmu.ac.uk



6 ways to make a career in music tec... musictech.net



Music Technology and Audio Production ... kent.ac.uk



Music Technology BASc dmu.ac.uk



Music technology - Wikipedia en.wikipedia.org



What is music technology musictechstudent.co.uk



Music, Technology and Performance BA (Ho... dmu.ac.uk



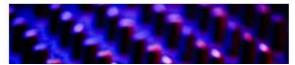
9 Technologies That Changed the Way ... interestingengineering.com



tricks for beginners to music product... musictech.net



7 stages of Music Production | A ... icmp.ac.uk





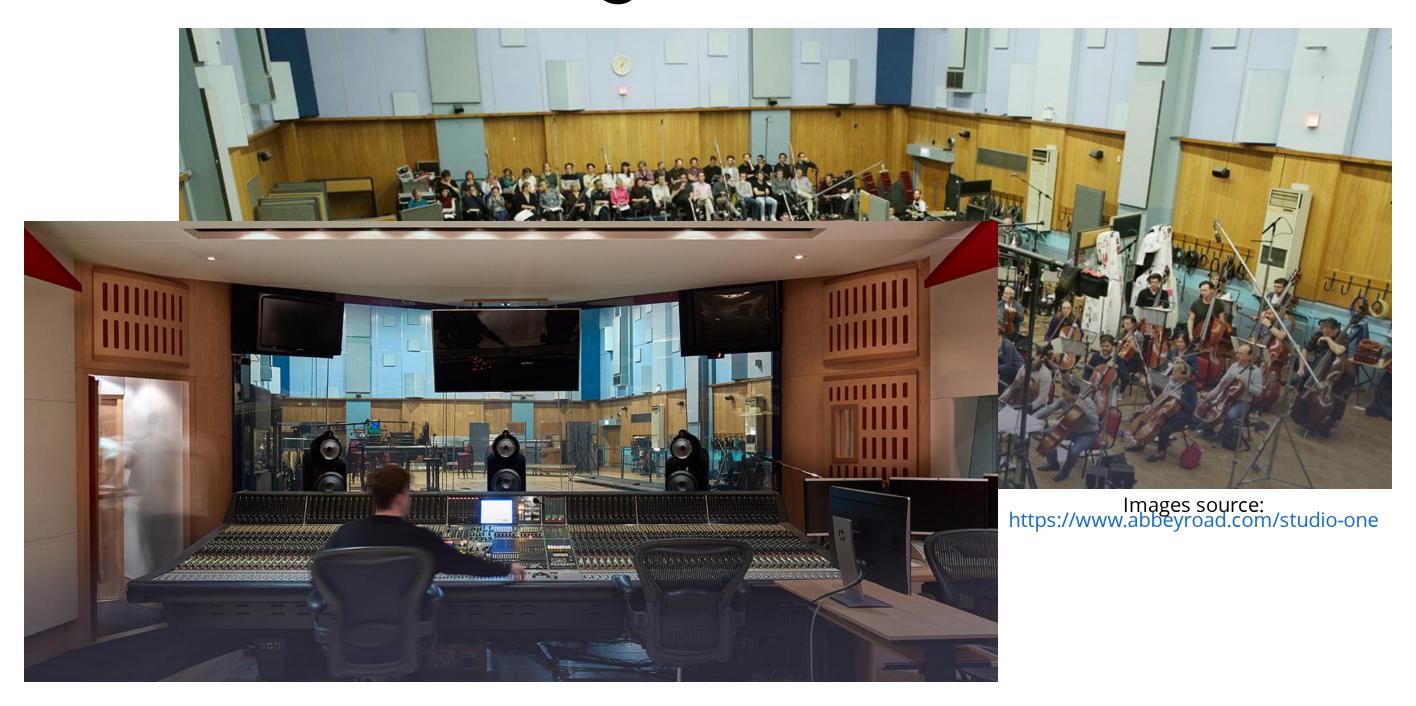






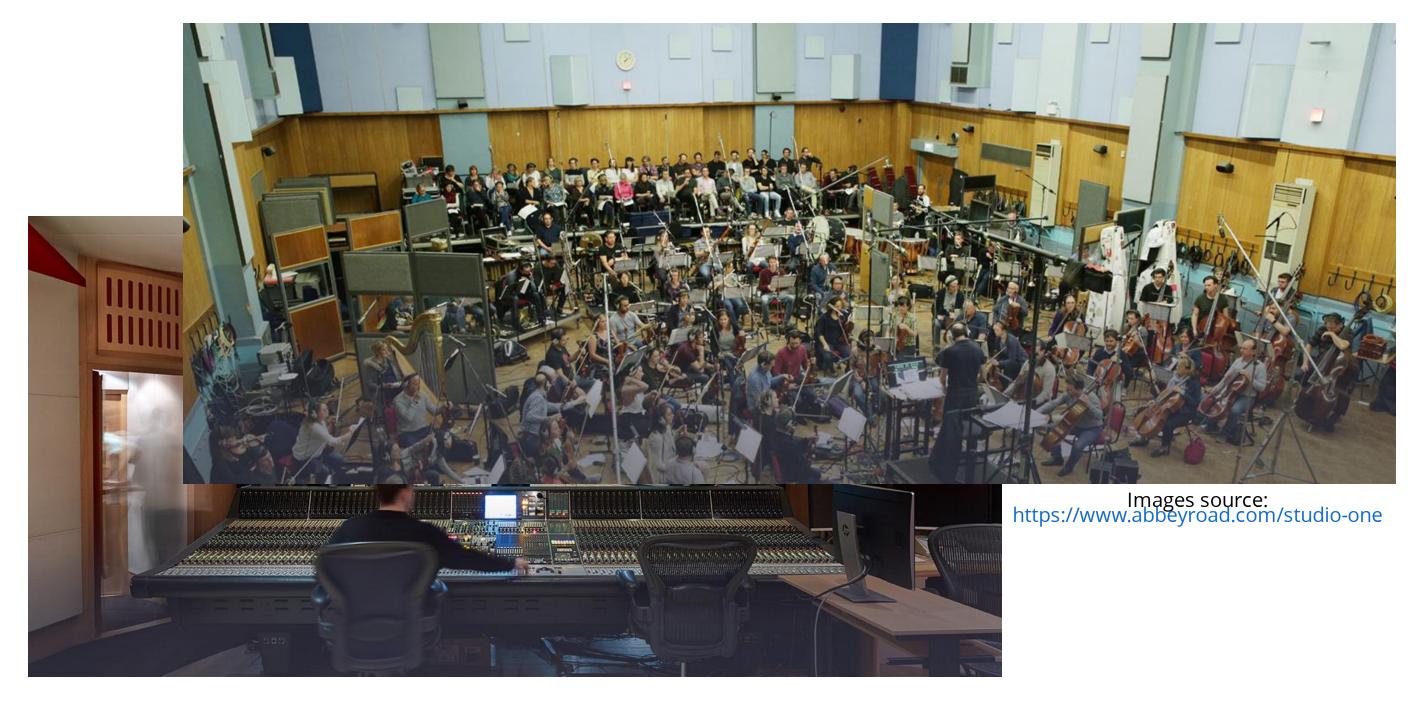
music recording





music recording





music production





Image source: https://tileyardnorth.co.uk/

music composition



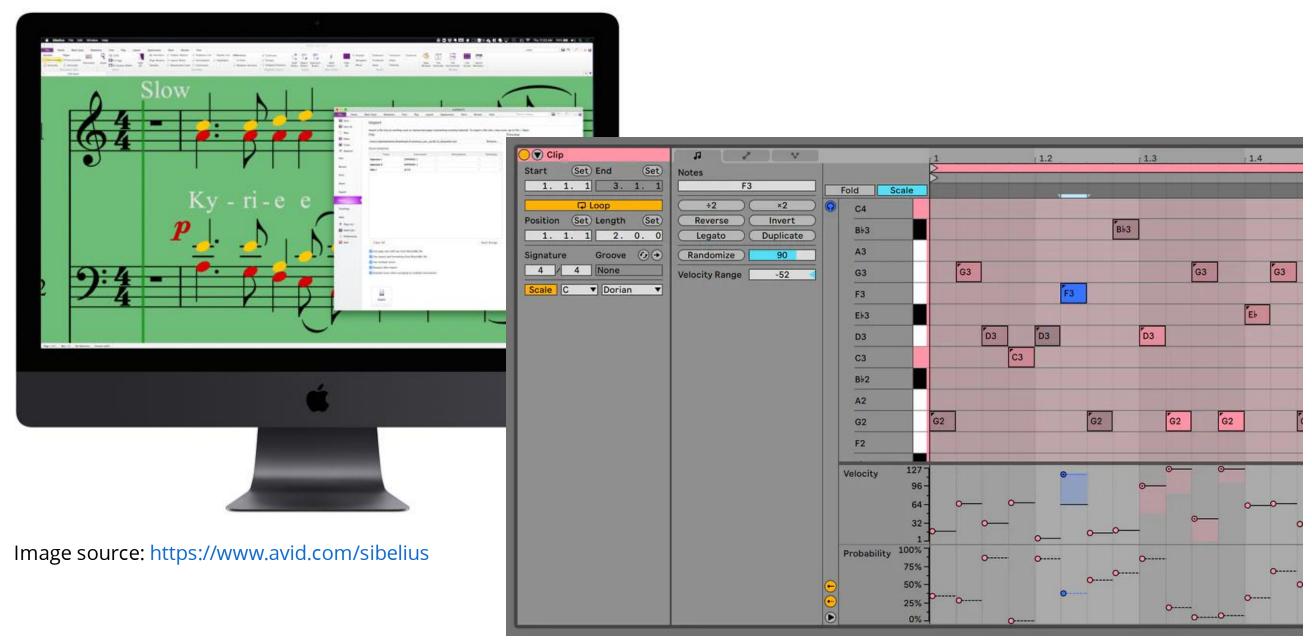


Image source: https://www.ableton.com/en/

music composition



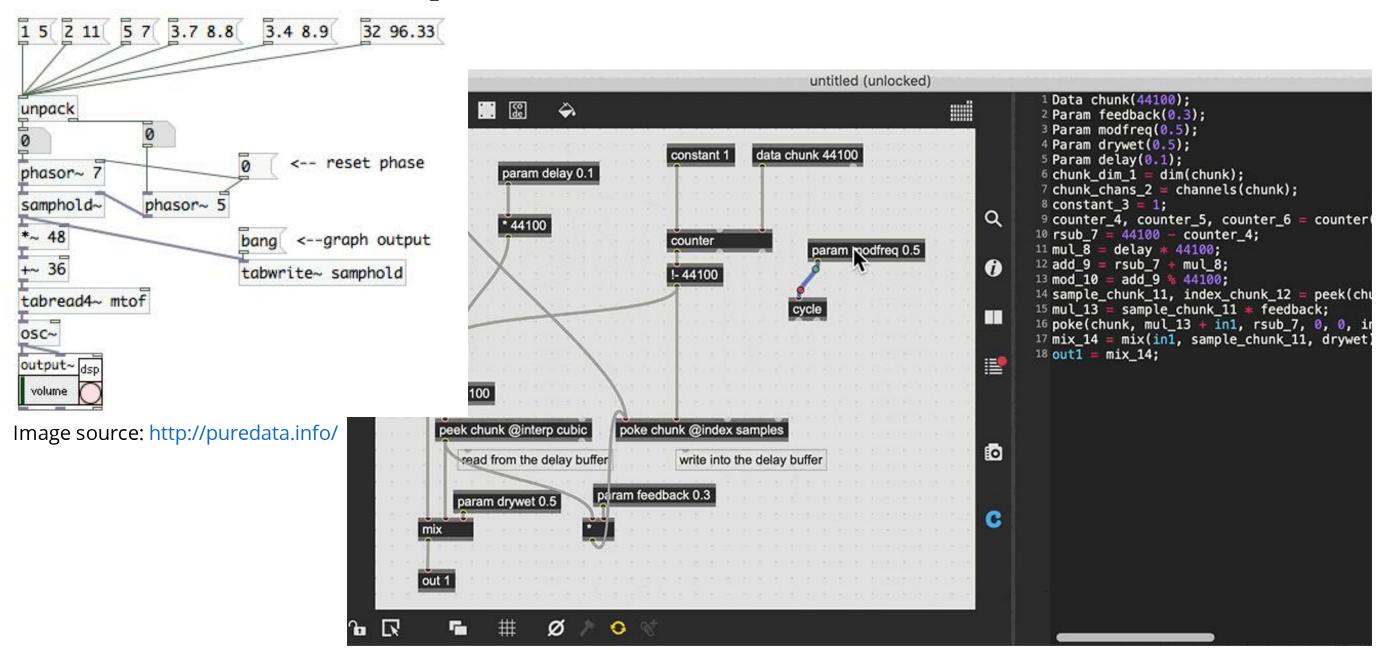


Image source: https://cycling74.com/products/max

music performance

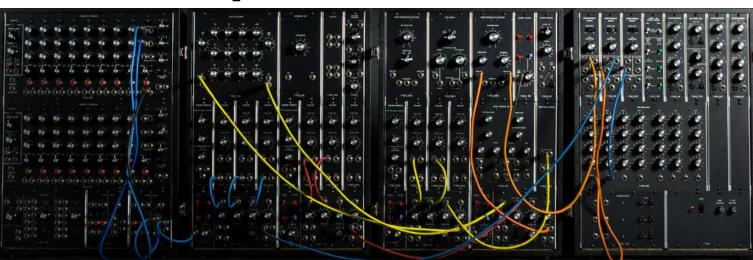


Image source: https://www.moogmusic.com



Image source: https://www.nordkeyboards.com/





"Home Recording Studio Setup" by gavinwhitner is licensed under CC BY 2.0

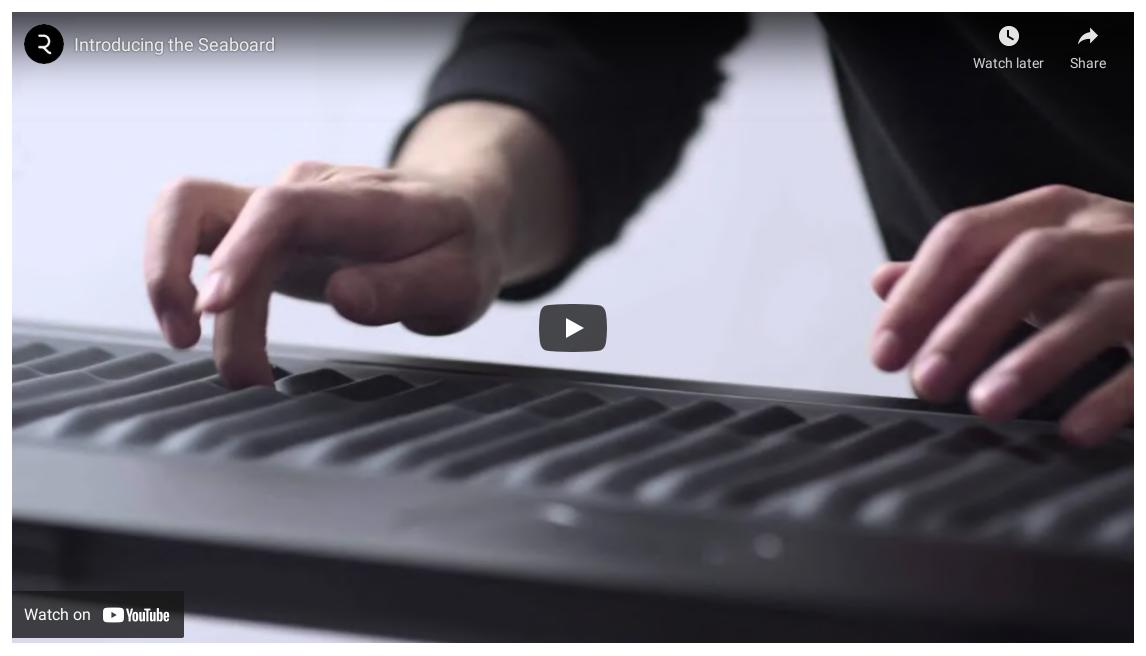


Image source: https://reactable.com/



instruments

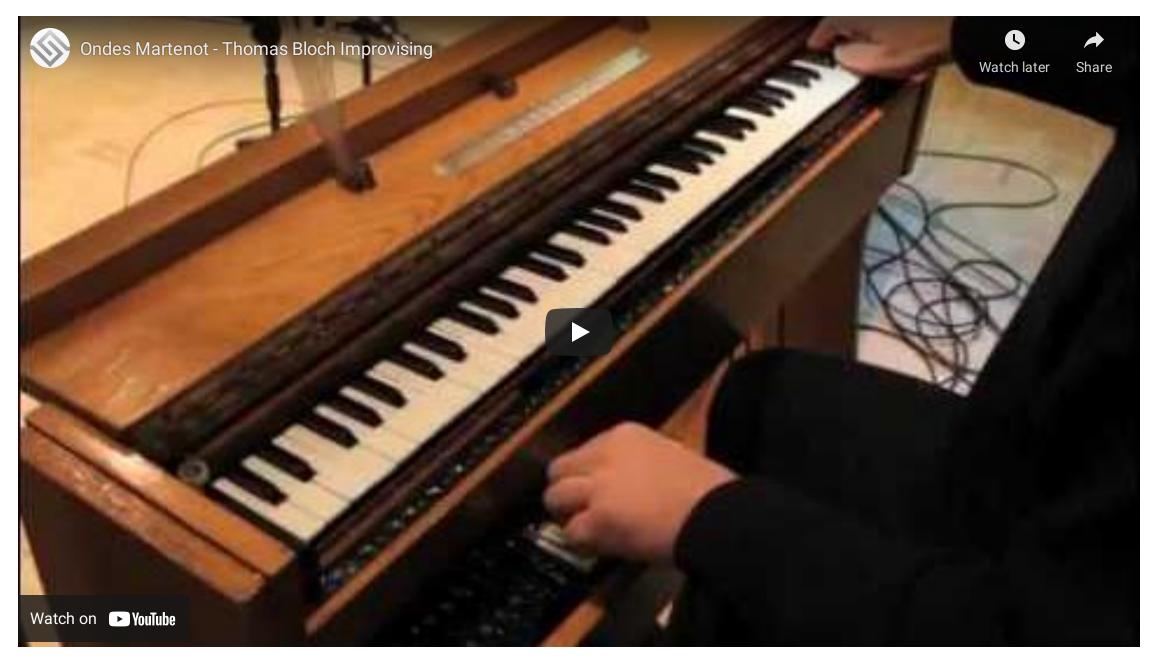




Video source: https://youtu.be/8n-bEy9ISpM?t=5

instruments





Video source: https://youtu.be/NnU0ATg24dU?t=13

instruments



What are the similarities and differences between the two instruments?





Video source: https://youtu.be/8n-bEy9ISpM

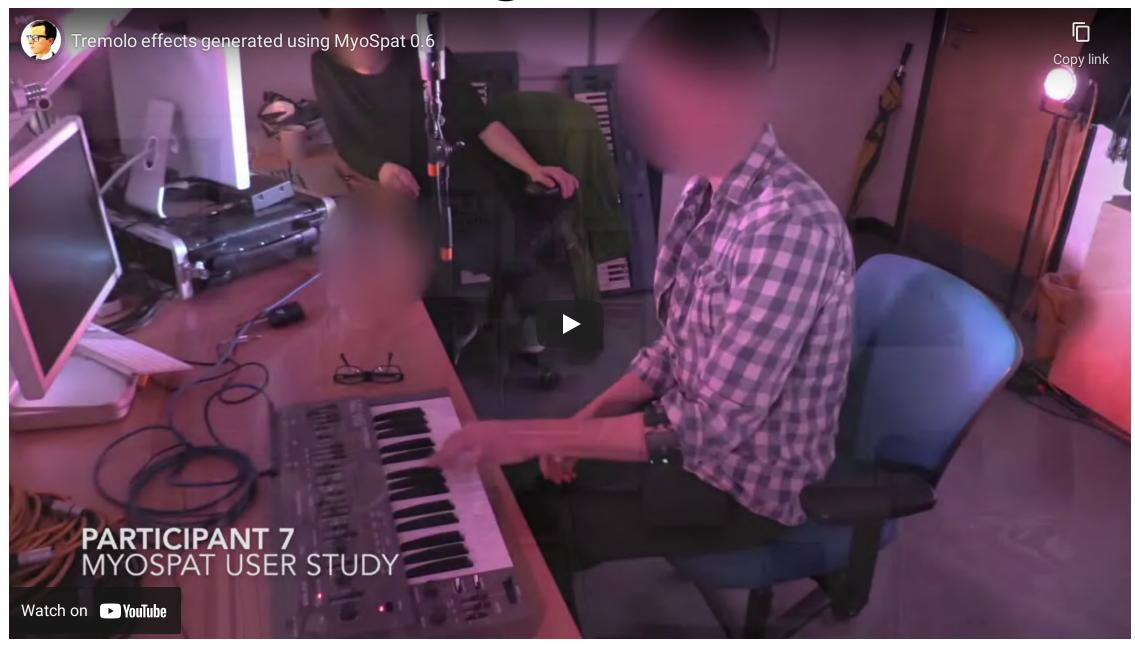
Video source: https://youtu.be/NnU0ATg24dU?t=13





Video source: https://youtu.be/s8OT7EFKE78





Video source: https://youtu.be/tTYUbqV-2Oc





Part of the HaroCl project Di Donato (2017)

Video source: https://youtu.be/gYu4Za-1E48

acousmonium

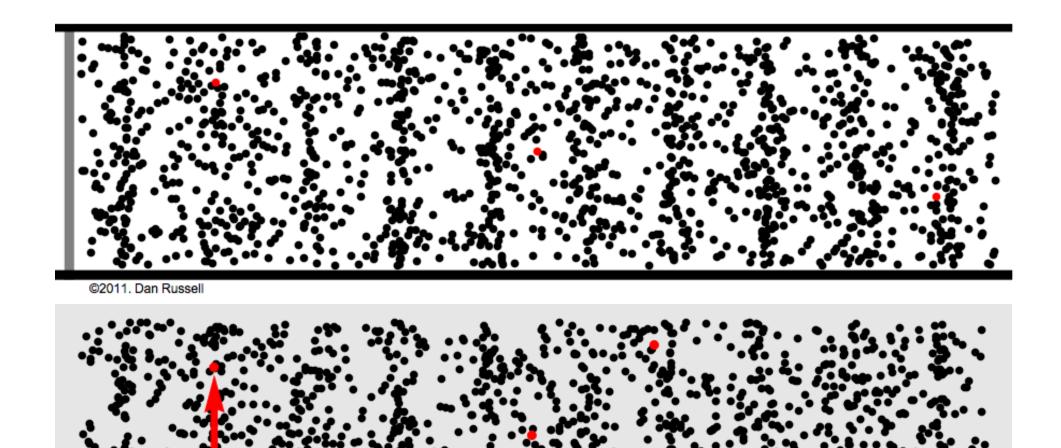




Images source: https://www.acousmonium.info

what is a sound wave?







Compression Compression

Rarefaction

particle

wave

©2015, Dan Russell

How behave sound waves?



Applet source: https://www.falstad.com/ripple/

Please, click on the link to view the ripple applet

sound art installations





Janet Cardiff (2001) The Forty Part Motet, Fonadation d'entreprise Hermès, Tokyo, 2009. Photo by Atsushi Nakamichi / Nacása & Partners Inc. Courtesy of the Fondation d'entreprise Hermès, 2009. Image source: https://cardiffmiller.com/installations/the-forty-part-motet/

sound art installations





Curtin Rivera and Di Donato (2021) Within Us, Interactive Season, LCB Depot, Leicester, United Kingdom

https://www.balandinodidonato.com/soundart/installations/withinu



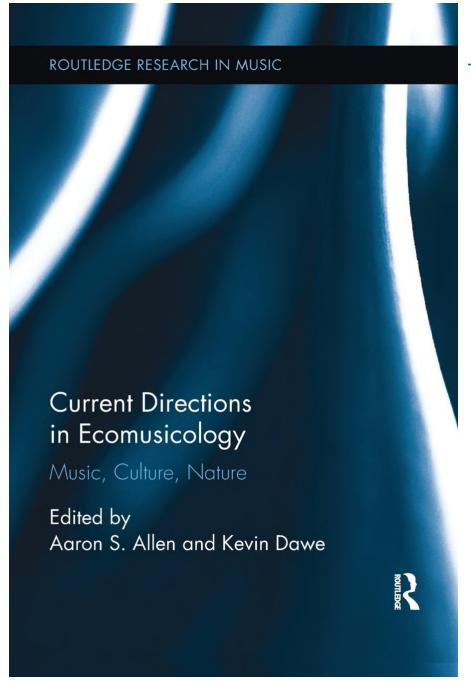
Di Donato and Curtin Rivera (2019) Inner, Biennale ArteScienza, Rome, Italy https://www.balandinodidonato.com/soundart/installations/inner/

societal challenges



ps://www.routledge.com/Current-Directions-in-lusic-Culture-Nature/Allen-31138062498





v.routledge.com/Current-Directions-in-yre-Nature/Allen-

accessibility & inclusivity





Image source: https://mctmaster.github.io/appliedproject/2020/05/02/MotionComposer.html





Logo and image source: http://motioncomposer.de/

accessibility & inclusivity





Video source: https://youtu.be/4aDj7Ma_HkE



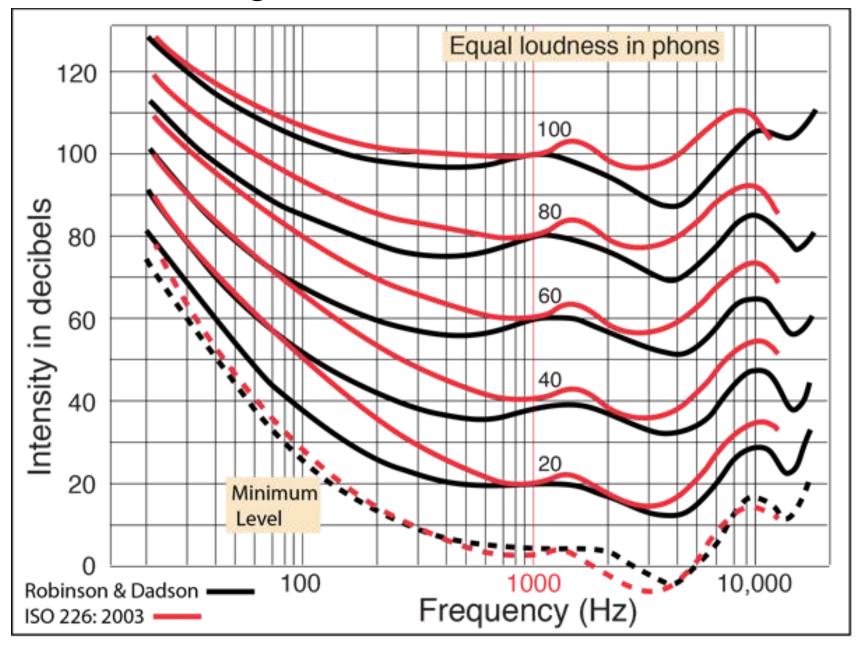


Image source: http://hyperphysics.phy-astr.gsu.edu/hbase/Sound/eqloud.html#c1



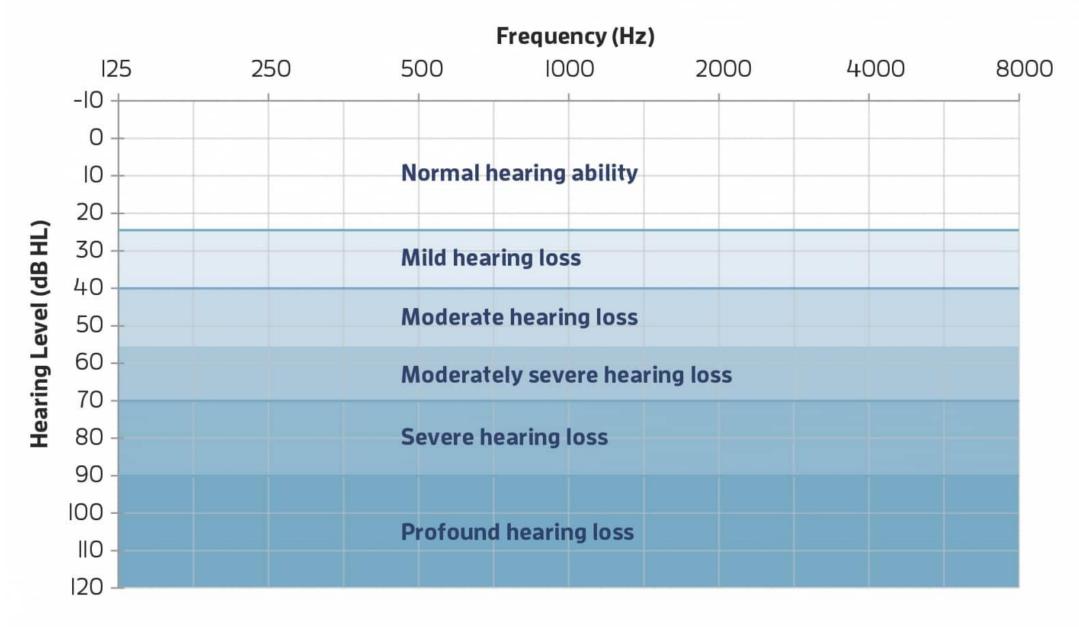


Image source: https://www.healthyhearing.com/report/41775-Degrees-of-hearing-loss

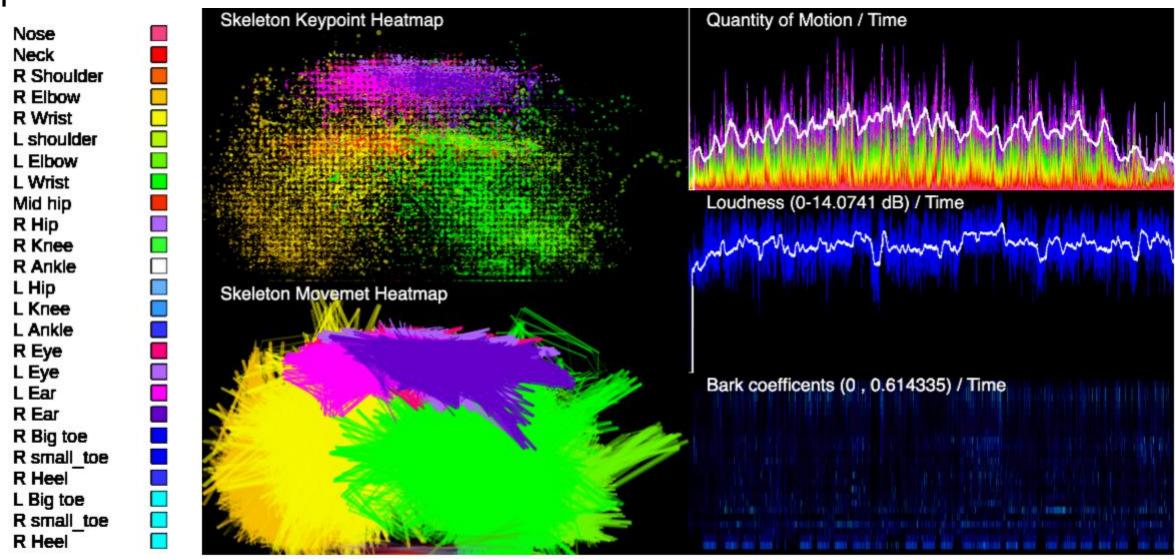




Video source: https://youtu.be/MGRWeKeh9NE?t=150



Example of motion and audio features data of ASL translated music.

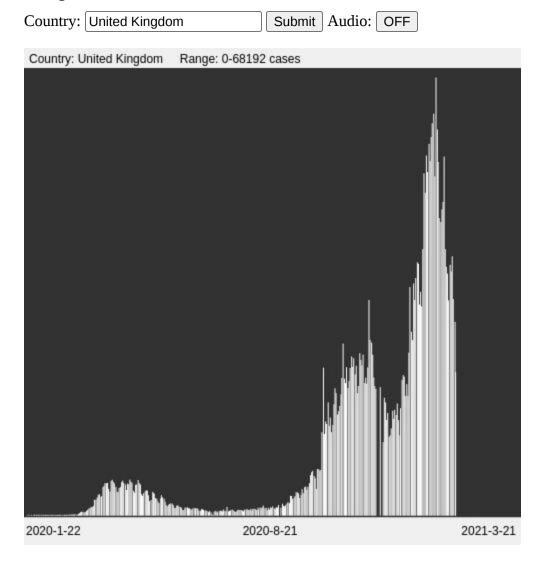


Part of the HSI project. Di Donato (2021)

sonification



Sonification of Covid-19 daily cases from 22/01/2020 to today.



Di Donato (2021)

communication





Image source: https://avt.co.za/the-different-types-of-video-conferencing

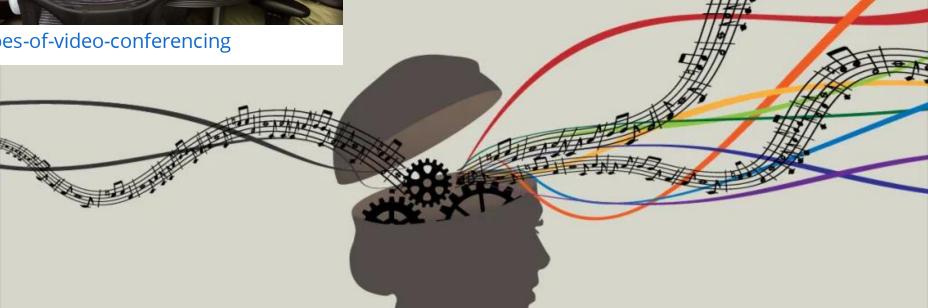
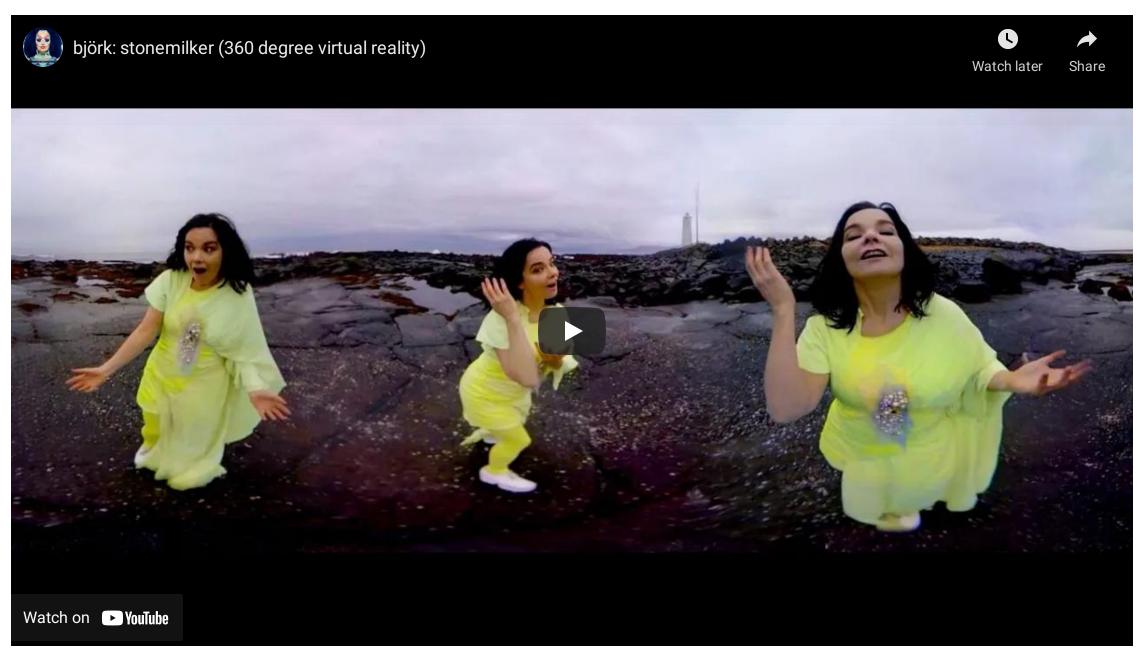


Image source: https://knowingneurons.com/2019/02/28/music-for-the-mind-how-music-nurtures-cognitive-development/

communication





Video source: https://youtu.be/gQEyezu7G20

so ..., music technology "is"...



- Music recording
- Music production
- Music composition
- Music performance
- Instruments (playing/building)
- Interaction design
- Sound installations

- Acoustic,
- Psychoacoustic
- Accessibility
- Sonification
- Communication
- ...
- ...

Norwegian University of Science and Technology

Takk for at du lyttet!

Dr Balandino Di Donato balandino.didonato@leicester.ac.uk