

# Konstantinos Tsioutas

## Curriculum Vitae

(+30) 6934525150

Email address: [tsioutas1@gmail.com](mailto:tsioutas1@gmail.com)

Website: <https://sites.google.com/view/ktsioutas/home>

LinkedIn : <https://www.linkedin.com/in/konstantinos-tsioutas-47301348/>

Orcid: <https://orcid.org/0000-0003-1136-3803>

Scholar: <https://scholar.google.gr/citations?user=2a5dcJwAAAAJ&hl=el&oi=sra>

### Research Interests

---

- Network Music Performance
- Interactive Digital Installations
- Audio Signal Processing
- Audio design algorithms
- Audio streaming over IP Networks
- Quality of Experience
- Emotion Recognition through EEG and Facial Analysis

### Education

---

- Ph.D. in Computer Science, Athens University of Economics and Business, Department of Informatics, Thesis title: "Quality of Musicians Experience in Network Music Performance", Supervisor Professor George Xylomenos
- M.Sc. in Radio Electronics and Telecommunications. University of Athens, Department of Physics.
- M.Sc. in Sonic Arts and Technologies, Ionian University, Music Department.
- Diploma in Electronics Engineering, ASPETE University of Athens, Department of Electronics Engineering

### Teaching Experience

---

- **2022–2024 (5 semesters):** ESPA Program – Acquisition of Academic Experience, Hellenic Mediterranean University, Department of Music Technology and Acoustics:
  - Multimodal Perception in Information Systems
  - Object-Oriented Programming
  - Sound and Computer Networks
  - Application Development for Mobile Devices
- **Spring Semester 2024–2025:** Adjunct Lecturer, Department of Music Technology and Acoustics:
  - Sound and Computer Networks
  - Application Development for Mobile Devices
- **2020–2021:** Academic Fellow, Department of Interior Architecture, University of West Attica.
- **2022–2023:** Lecturer in Computer Science, Mediterranean College.
- **2016–2023:** Visiting Lecturer, *Interactive Systems*, MA Program *Digital Forms of Art in the Contemporary Era*, Department of Audio and Visual Arts, Ionian University.
- **2018–2022:** Visiting Lecturer, *Interactive Systems*, MA Program *Sustainable and Social Design*, Department of Interior Architecture, University of West Attica.
- **2013–2019:** Department of Folk and Traditional Music (former TEI of Epirus). Independent teaching:
  - Music Informatics (Lecture + Lab)
  - Sound Engineering (Lecture + Lab)

- **2004–2006:** Laboratory Associate, Radio Engineering and Television, ASPAITE, Department of Electronic Engineering.
- **2019–2021:** Substitute Teacher, Secondary Education, Ministry of Education.
- **2011–2020:** Hourly-paid Instructor, EPAS OAED (Vocational School).
- **2011–2019:** Hourly-paid Instructor, IEK DELTA (Vocational Training Institute).
- **2011–2016:** Hourly-paid Instructor, Public IEK (Vocational Training Institutes).
- 2019 – 2020. Teaching Assistant as a PhD candidate: Python Programming Language
- 2020 – 2021. Teaching Assistant as a PhD candidate: Operating Systems, Threads, Programming in C
- 2020 – 2021. Teaching Assistant as a PhD candidate: Multimedia
- 2011 – 2022 June . Tutor of Electronics Engineering in public vocational schools.

## Research Projects

---

- **September 2024 – April 2025:** TENE MP: TELEPRESENCE-ENHANCED NETWORK MUSIC PERFORMANCE – Program HORIZON-CL4-2021-HUMAN-01-25 - SPIRIT - OC1 – Innovative Experiments. Scientific Coordinator: G. Xylomenos, Athens University of Economics and Business (AUEB).
- **June 2022 – December 2023:** Virtual Laboratory for Education and Collaboration in Music, Hellenic Mediterranean University, Department of Music Technology and Acoustics. Scientific Coordinator: Chrysoula Alexandraki.
- **2015 – present:** Master’s Program *Audiovisual Arts in the Digital Age*, Department of Audio and Visual Arts, Ionian University. Scientific Coordinator: K. Tiligadis. Support of the online distance-learning platform of the master’s program.
- **March – April 2019:** Execution of Internet Music Performance Experiments and presentation at workshops. Scientific Coordinator: G. Xylomenos, AUEB.
- **August – December 2020:** SOFIE: SECURE OPEN FEDERATION FOR INTERNET EVERYWHERE. Scientific Coordinator: G. Polyzos, AUEB.
- **July – December 2021:** INTERCONNECT: INTEROPERABLE SOLUTIONS CONNECTING SMART HOMES, BUILDINGS AND GRIDS. Scientific Coordinator: G. Polyzos, AUEB.

## Digital Art Exhibitions and Conferences

---

- “Intangible Victory, Interactive Audio Sculpture”, Team “Heimer & Alz”: Tsioutas K, Tiligadis K, Sitorengo A, Sidiropoulos N. National Museum of Modern Art, February 2021 Exhibition Symbols and Ruins.
- “Adeouses Cities, Sound Installation”, Corfu 2018.
- Google Bike, VR System, Athens Music Hall 2016
- Bike in Corfu, Interactive Installation, Ionian University Corfu 2015.
- ICMC – SMC 2012, Technical Manager for Interactive Installations. 2014.
- “Buggs, Interactive Sound Installation”, Corfu, Greece 2008.

## Supervising Students

---

- Corina Papafragkou, “Meeto”, Interactive Installation, Dissertation. Master Course of Digital Arts in Modern Age, Audio and Visual Arts Department, Ionian University, 2022 June
- Chrysa Petropoulou, “Covid 19”, Interactive Installation, Dissertation. Master Course of Social and Sustainable Design, Department of Interior Design, University of West Attica 2019 June
- Katholiki Balourdou, “Mirror”, Interactive Installation, Dissertation. Master Course of Social and Sustainable Design, Department of Interior Design, University of West Attica 2019 June
- Maria Mpolia, “Mapping Projection”, Dissertation. Postgraduate Program at the Department of Interior Design, University of West Attica 2018 June

## Digital Skills

---

- C, C++, C#
- JUCE, Gstreamer , Web-audio API
- Java
- JavaScript
- MATLAB
- HTML, CSS
- Processing, Arduino Platform, Unity, Max Msp, Pure Data
- Audacity, Cubase, Adobe Suite
- Linux bash scripting.

## Publications

---

- [1] K. Tsioutas and G. Xylomenos, "Network Music Performance in 5G Networks", *2025 IEEE 6th International Symposium on the Internet of Sounds (IS2)*, DOI: [10.1109/IS264627.2025.11284565](https://doi.org/10.1109/IS264627.2025.11284565)
- [2] K Tsioutas, G Xylomenos, I Doumanis, "Impact of Audio Delay and Quality in Network Music Performance," *Future Internet* 17 (8), 337 <https://doi.org/10.3390/fi17080337>
- [3] C. Alexandraki and K. Tsioutas, "Web-based Collaborative Music Lessons: Approaches, Challenges and Perspectives," *accepted for publication in the Journal of the Audio Engineering Society*, 2025.
- [4] K. Tsioutas, I. Doumanis, K. Dalezios, D. Siafla, and K. Tiligadis, "Evaluating Emotional Responses to Experimental Video Art," *accepted for publication in the Proc. of the 12th IFIP Int. Conf. on New Technologies, Mobility and Security (NTMS)*, Paris, France, Jun. 18–20, 2025.
- [5] K. Tsioutas, Y. Thomas, F. Bistas, I. Barous, G. Xylomenos, and G. Polyzos, "Network Music Performance Beyond 4G," *2025 Int. Wireless Commun. and Mobile Comput. Conf. (IWCMC)*, 2025, doi: [10.1109/IWCMC65282.2025.11059620](https://doi.org/10.1109/IWCMC65282.2025.11059620).
- [6] I. Doumanis and K. Tsioutas, "Evaluating a Mobile Game for Urban Exploration Utilising Mobile Edge Computing (MEC)," *37th Int. BCS Human-Computer Interaction Conf. (BCS HCI 24)*, 2024, doi: [10.14236/ewic/BCSHCI2024.23](https://doi.org/10.14236/ewic/BCSHCI2024.23).
- [7] I. Doumanis, D. Oikonomou, and K. Tsioutas, "Evaluating Immersion in Digital Video Using EEG and Subjective Measures: A Pilot Study," *Proc. of the 8th Int. Conf. on Computer-Human Interaction Research and Applications (CHIRA)*, Porto, Portugal, Nov. 21–22, 2024, doi: [10.1007/978-3-031-82633-7\\_23](https://doi.org/10.1007/978-3-031-82633-7_23).
- [8] C. Alexandraki, N. Mimidis, Y. Viglis, A. Nousias, D. Milios, and K. Tsioutas, "Collaborative Playalong Practices in Online Music Lessons: the MusiCoLab Toolset," *2023 4th Int. Symp. on the Internet of Sounds*, Pisa, Italy, 2023, pp. 1–10, doi: [10.1109/IEEECONF59510.2023.10335236](https://doi.org/10.1109/IEEECONF59510.2023.10335236).
- [9] K. Tsioutas and G. Xylomenos, "Assessing the Effects of Delay to NMP via Audio Analysis," *SN Comput. Sci.*, vol. 3, no. 1, 2022, doi: [10.1007/s42979-022-01555-6](https://doi.org/10.1007/s42979-022-01555-6).
- [10] K. Tsioutas and G. Xylomenos, "Audio Delay in Web Conference Tools," *Proc. of the 7th Int. Web Audio Conf. (WAC2022)*, Cannes, France, Jul. 6–8, 2022, doi: [10.5281/zenodo.6768273](https://doi.org/10.5281/zenodo.6768273).
- [11] K. Tsioutas and G. Xylomenos, "On the Impact of Audio Characteristics to the QoME of NMP," *J. Audio Eng. Soc.*, vol. 69, no. 6, pp. 384–396, Jun. 2021, doi: [10.17743/jaes.2021.0041](https://doi.org/10.17743/jaes.2021.0041).

- [12] K. Tsioutas, K. Ratzos, G. Xylomenos, and I. Doumanis, "Multimodal Assessment of Network Music Performance," *Proc. of the ICMI 2021 Workshop on Multimodal Affect and Aesthetic Experience (MAAE)*, Montreal, Canada, 2021, doi: [10.1145/3461615.3485418](https://doi.org/10.1145/3461615.3485418).
- [13] K. Tsioutas, G. Xylomenos, and I. Doumanis, "An Empirical Evaluation of QoME for NMP," *2021 11th IFIP Int. Conf. on New Technologies, Mobility and Security (NTMS)*, Paris, France, 2021, pp. 1–5, doi: [10.1109/NTMS49979.2021.9432657](https://doi.org/10.1109/NTMS49979.2021.9432657).
- [14] K. Tsioutas and G. Xylomenos, "Assessing the QoME of NMP via Audio Analysis Tools," *18th Int. Conf. on Signal Processing and Multimedia Applications*, Jan. 2021, doi: [10.5220/0010604100230030](https://doi.org/10.5220/0010604100230030).
- [15] K. Tsioutas, G. Xylomenos, I. Doumanis, and C. Angelou, "Quality of Musicians' Experience in Network Music Performance: A Subjective Evaluation," *Audio Eng. Soc. Conv. 148*, Vienna, Austria, May 28, 2020, Available: <https://www.aes.org/e-lib/browse.cfm?elib=20774>.
- [16] K. Tsioutas, I. Doumanis, and G. Xylomenos, "A Framework for Understanding and Defining Quality of Musicians' Experience in Network Music Performance Environments," *Proc. of the Audio Eng. Soc. Conv. 146*, Dublin, Ireland, 2019, [Online]. Available: <https://www.aes.org/e-lib/browse.cfm?elib=20333>.
- [17] K. Tsioutas, G. Xylomenos, and I. Doumanis, "Aretousa: A Competitive Audio Streaming Software for Network Music Performance," *Proc. of the Audio Eng. Soc. Conv. 146*, Dublin, Ireland, 2019, [Online]. Available: <http://www.aes.org/e-lib/browse.cfm?elib=20334>.
- [18] K. Tsioutas, «Aretousa: A Graphical User Interface for Controlling Audio Streams», *Πρακτικά 8<sup>ου</sup> Συνεδρίου Ακουστικής ΕΛΙΝΑ*, Πάτρα 2018
- [19] K. Tsioutas, «Network Music Performance - Improving the Quality of Service», *Πρακτικά 7<sup>ου</sup> Συνεδρίου Ακουστικής ΕΛΙΝΑ*, Θεσσαλονίκη 2014
- [20] K. Tsioutas and K. Asimakopoulos, "Google Bike: A Prototype Virtual Reality System as a Support Tool in Educational Scenarios," *Proceedings of the 6th Panhellenic Scientific Conference on the Integration and Use of ICT in the Educational Process*, Department of Primary Education, National and Kapodistrian University of Athens, 2019. [Link](#)