

CURRICULUM VITAE

Personal Details

Name Dr. Stella Paschalidou
Lecturer in “Sound and Acoustic Technology”

Address Hellenic Mediterranean University
School of Music & Optoacoustic Technologies
Dept. in Music Technology & Acoustics
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Scientific Interests

Keywords

- Music & Movement:
 - Technologies and methods for motion capture, recording & computational analysis of human body movement and other multimodal data,
 - Embodied music cognition,
 - Human-Computer Interaction in music,
 - Interactive audio systems,
 - New electronic musical instruments
- Computational ethnomusicology (Hindustani music)

Formal Education

PhD in Music Computing
2017

Institution *Durham University, UK - Music Department*

Thesis Effort in gestural interactions with imaginary objects in Hindustani Dhrupad vocal music

Supervisors prof. Martin Clayton and prof. Tuomas Eerola

Keywords Music & Movement, Classical Indian singing, Human-Computer Interaction, motion capturing

MSc in Music Technology
2003

Institution *University of York, UK - Music and Electronics Department*

Grade 70% in taught courses and 75% in final project

Thesis Alternative Control of Digital Audio Effects

Supervisors prof. Andy Hunt and prof. Damian Murphy

Keywords HCI in music performance, gestural control of audio FX, mapping

BSc in Physics
2000

Institution *Aristotle University of Thessaloniki, Greece - Physics Department*

Grade 8.5/10

Thesis Study of the chaotic behaviour in Chua’s third order canonical electrical oscillator

Supervisors prof. Ioannis Kyprianidis and prof. Ioannis Stoumpoulos

Keywords Non-linear electric circuits

High School
1994

German School of Thessaloniki

- German final exams certificate (Abitur): 1.5

Teaching Experience

Higher Education

**Lecturer in
Music Technology & Acoustics
2004 – date**

Institution

**Hellenic Mediterranean University (HMU)
(previously known as Technological and Educational Institute
(TEI) of Crete)
Dept. of Music Technology and Acoustics**

2010 – date

Lecturer – tenured

2004 – 2010

Contract-based teaching assistant

Postgraduate:

- Music & movement

Undergraduate:

- Introduction to Audio Programming Environments
- Analysis methods for music & movement
- Multimodal perception in information systems
- Sound synthesis
- Audio Communication Protocols
- Seminar in new Electronic Musical Instruments, Audio interaction
- Applied Acoustics
- Introduction to programming
- Selected topics in programming
- Supervision of final projects

Taught modules
(current & past)

Author of
Lecture Notes

- Audio Communication Protocols (2006)
- Applied Acoustics (2006)

**Vocational Training
2007 – 2008**

Institution

**Public Institute of Vocational Education and Training (IEK),
Rethymno**

Taught modules

- Introduction to Computer Music Synthesis & Editing Techniques
- Introduction to Computers

**High-school
2006 – 2008**

Institution

Public high-school, Rethymno

Taught modules

Physics

Other Professional Experience

**Software Engineer in
Telecommunications
2000 – 2002**

Company

**Siemens A.E. Software Center, R&D Athens, dept. of
“Development, Innovations and Projects” (DI&P)**

Main tasks

Design, development, implementation and qualitative software testing in Electronic Digital Switching Exchange (EWSD) of wireline communication networks with an emphasis on the processing, coding, and transmission of voice signals through VoIP protocols for the ‘SURPASS’ project

Publications

International peer-reviewed Journals

- Paschalidou, S. (2022). Effort inference & prediction by acoustic and movement descriptors in interactions with imaginary objects during Dhrupad vocal improvisation. *Wearable Technologies*
- Hermann T., Paschalidou S., Beckmann D., Ritter H. (2006). Gestural Interactions for Multi-parameter Audio Control and Audification. In: *Revised Selected Papers (Gibet S., Courty N., Kamp JF. (eds)) Gesture in Human-Computer Interaction and Simulation: 6th International Gesture Workshop. GW 2005*. Lecture Notes in Computer Science, vol 3881. Springer, Berlin, Heidelberg

International peer-reviewed Conferences

- Miliarisi, I., Paschalidou, S. (2022). A deep learning architecture for automatic raga identification. *4th International Conference on Advances in Signal Processing and Artificial Intelligence (ASP AI' 2022)*, Corfu, Greece, 19-21 October 2022
- Paschalidou, S. (2022). Effort inference & prediction by acoustic and movement descriptors in interactions with imaginary objects during Dhrupad vocal improvisation. *8th International Symposium on Movement and Computing (MOCO'22)*, Chicago, Illinois, USA, 22-25 June 2022
- Antoniadis, P., Paschalidou, S., Duval, A., Jégo J.-F., & Bevilacqua F. (2022), Rendering embodied experience into multimodal data: concepts, tools and applications for Xenakis' piano performance. In: *Proceedings of the Centenary International Symposium Xenakis 2022* (p. 178), Athens & Nafplio, Greece, 24-29 May 2022
- Holzapfel, A., Hagleitner, M., & Paschalidou, S. (2020). Diversity of Traditional Dance Expression in Crete: Data Collection, Research Questions, and Method Development. In: *Proceedings of the 1st Symposium of the ICTM Study Group on Sound, Movement, and the Sciences (SoMoS)* (p. 16), Stockholm, Sweden, 28-30 September 2020
- Paschalidou, S., Clayton, M., & Eerola, T. (2018). Effort-voice relationships in interactions with imaginary objects in Hindustani vocal music. In: *Proceedings of the 8th International Workshop on Folk Music Analysis (FMA)*, Thessaloniki, Greece: Aristotle University of Thessaloniki (pp. 80-81), Thessaloniki, Greece, 26-29 June 2018
- Paschalidou, S., Clayton, M., & Eerola, T. (2018). Effort in gestural interactions with imaginary objects in the context of Dhrupad vocal improvisation. In: *Proceedings of the 11th International Conference of Students of Systematic Musicology (SysMus)*, Belo Horizonte, Brazil (pp. 5-9), Belo Horizonte, Brazil, 6-8 June 2018
- Paschalidou, S., Clayton, M., Eerola, T. (2017). Mapping physical effort to gesture and sound during interactions with imaginary objects in Hindustani vocal music. In: *Proceedings of the 25th Anniversary Conference of the European Society for the Cognitive Sciences of Music (ESCOM) Conference*, Ghent, Belgium, 31 July – 4 August 2017
- Paschalidou, S., Clayton, M., & Eerola, T. (2017). Effort in Interactions with Imaginary Objects in Hindustani Vocal Music—Towards Enhancing Gesture-Controlled Virtual Instruments. In: *Proceedings of the 2017 International Symposium on Musical Acoustics (ISMA)* (pp. 140-142), Montreal, QC, Canada, 18-22 June 2017
- Paschalidou, S., Eerola, T., & Clayton, M. (2016). Voice and movement as predictors of gesture types and physical effort in virtual object interactions of classical Indian singing. In: *Proceedings of the 3rd International Symposium on Movement and Computing (MOCO)* (p. 45), Thessaloniki, Greece, 5-6 July 2016. ISBN: 978-1-4503-4307-7
- Paschalidou, S. & Clayton, M. (2015). Towards a sound-gesture analysis in Hindustani dhrupad vocal music: effort and rag space. In: *International Conference on the Multimodal Experience of Music (ICMEM)*, Sheffield, UK, 23-25 March 2015

- Hermann T., Paschalidou S., Beckmann D., Ritter H. (2006) Gestural Interactions for Multi-parameter Audio Control and Audification. In: *Gesture in Human-Computer Interaction and Simulation: 6th International Gesture Workshop (GW)*, Berder Island, France, 18-20 May 2005
- Stoumpoulos, I.N., Kyprianidis I.M., Charalampidis, P., Kouremeti, N., Paschalidou, S. (2000). Chaos and Hyperchaos in a non-linear, non-autonomous electrical circuit of fourth grade. In: *Bountis T., Pnevmatikos S. (eds) Order and Chaos in Non-linear Dynamic Systems (Τάξη και Χάος στα μη γραμμικά δυναμικά συστήματα)*, Vol. 6, Pnevmatikos Y.A. (Πνευματικός Γ.Α.), Athens
- Paschalidou, S., Clayton, M., & Eerola, T. (2018). Effort in gestural interactions with imaginary objects in Hindustani dhrupad vocal improvisation. In: *1st Symposium on Scientific Approaches in Sound and Movement Research (SASMR18)*, Graz, Austria, 20-23 September 2018
- Paschalidou, S. (2011). Understanding the relationships between voice and gestures in Hindustani singing. Indian Musicological Society (IMS) Conference on “Studies and Research: Text”, Mumbai, India
- Mancas, R., Glowinski, D., Brunet, P., Cavallero, F., Macy, C., Maes, P. J., Paschalidou, S., Rajagopal, M.K., Schibeci, S., Vincze, L. & Volpe, G. (2010). Hypersocial museum: Addressing the social interaction challenge with museum scenarios and attention-based approaches. In: A. Camurri, M. Mancini, G. Volpe (Eds.) *Proceedings of the 5th International Summer Workshop on Multimodal Interfaces (eINTERFACE'09), Vol. 2, No. 3* (pp. 91-96), Faculté Polytechnique de Mons & DIST-University of Genova, Genova, Italy, 13 July – 7 August 2009. ISBN: 13-978-88-901344-7-0

International non-peer-reviewed Conferences

Other Presentations

Invited Talks

- Paschalidou (2022). Invited talk on ‘Human body movements in music’, *TEDx Sitia* on the theme of ‘Genesis’, Sitia, Greece, 2 October 2022.
- Bacon B., Hope C., Porfiriadis A., El Raheb K., Fdili Alaoui S., Paschalidou S. and Hajdu G. (2021). *Logothetis2021: Anestis Logothetis Centenary Symposium*. Invited to the Round Table for Anestis Logothetis’ Zeichen als Aggregatzustand der Musik from the point of view of embodied cognition and Human-Computer Interaction in music representation today, moderation by Antoniadis P., Athens, Greece, 7-8 December 2021

Performances

- Antoniadis, P., Duval, A., Jégo J.-F. & Paschalidou, S. (2022). (προσεχώς) Interactive audiovisual performance *Habitat (avec) Xenakis*, Centre Des Arts Enghien-Les-Bains (CDA), Paris, France, 24 November 2022

Workshops

- Antoniadis, P., Duval, A., Jégo J.-F., Bevilacqua F., & Paschalidou, S. (2022), Workshop: Rendering embodied experience into multimodal data: concepts, tools and applications for Xenakis' piano performance. In *Centenary International Symposium Xenakis 2022* (p. 251), Athens & Nafplio, Greece, 24-29 May 2022
- Paschalidou, S. (2018). Invited Talk & Workshop at the *1st Southern School on Music and Movement, Satellite event of Sysmus'18*, Belo Horizonte, Brazil, 3-5 June 2018

Grants / Scholarships

PhD 2010

For the PhD initially at the Open University and then at Durham University (following PhD supervisor) of in total 1.5 fully-funded years (prior to starting tenure track at TEI of Crete, Greece)

Travel Grant 2009

STSM (Short Term Scientific Mission) at the University of Genova, Italy with prof. Antonio Camurri in the framework of the COST IC0601-SID (Sonic Interaction Design). Research objective: ‘Oral music tradition gesticulation analysis and real-time applications’

**Travel Grant
2004**

STSM (Short Term Scientific Mission) at Bielefeld University, Germany with prof. Thomas Hermann in the framework of the COST Action Cost287-ConGAS (Gesture CONTROLLED Audio Systems) in Multidisciplinary Integrated Applications (WG3). Research objective: Integration of two multimodal gestural control systems: for DAFx & Sonification/Data Exploration

**Erasmus
1998**

Visiting student at the university of Dortmund, Germany, physics department

Event Organizations

**SoMoS Symposium
KTH Royal Institute of
Technology, Stockholm
25-27.9.2020**

Program Committee Member of the 1st Symposium of the ICTM Study Group on Sound, Movement and the Sciences (SoMoS)

**Digital Live Streaming for the
15th, 14th and 13th
International Documentary Film
Festival of Thessaloniki
- 18-22.3.2013
- 12-16.3.2012
- 14-18.3.2011**

Organizing the digital live streaming of documentary films from Thessaloniki to Rethymno - Music Technology & Acoustics Eng. Department of the TEI of Crete, Greece

**Days of Electroacoustic Music
- 2-4.12.2011
- 21-28.10.2008**

Member of the Organization Committee of 'Days of Electroacoustic Music' festival in 2011 and 2008 at the TEI of Crete, Dept. of Music Technology and Acoustics Eng., Rethymno, Greece

**Acoustic Ecology
26-27.2.2011**

Member of the Organization Committee of the 'Acoustic Ecology' conference, TEI of Crete, Dept. of Music Technology and Acoustics Eng., Rethymno, Greece

Workshops / Summer Schools (attendance)

**NordicSMC Winter School
4-8.3.19**

The 1st NordicSMC Winter School on sound and motion analysis. University of Oslo, RITMO, Oslo, Norway

**eNTERFACE '09
13.7-7.08.09**

The 5th International Summer School on interactive multimodal systems. University of Genova, Infomus Lab – DIST, Genova, Italy

**SID Training School
20-22.2.2008**

Funded participation on the Sonic Interaction Design Training School on Biomedical Data Sonification, COST IC0601 SID Training School, Bielefeld University, Germany

**Mo-Vi Lab
10-13.11.2007**

Movement-Video Lab Workshop in the framework of the 'Amber festival '07', Istanbul, Turkey

**Eyesweb Week 2
11-15.2.2008**

Workshop on the Eyesweb platform, Infomus Lab - DIST, University of Genova, Italy

**Choreographic Computations
4.6.2006**

Workshop on 'Choreographic Computations: Motion Capture and Analysis for Dance', IRCAM - Centre Pompidou, Paris, France

**Eyesweb Week
6-11.2.2006**

Workshop on the Eyesweb platform, Infomus Lab - DIST, University of Genova, Italy

**Kyma system
22-24.11.2004**

Workshop on the Kyma system, Ioanian University, Corfu, Greece

**Advanced Physics
1-15.7.1997**

Summer School on 'Laser Applications in Modern Physics', University of Crete, Heraklion, Greece

Additional Qualifications

Experience with

Capturing and processing of audio, motion and other multimodal data

Matlab, Rstudio, Max/Msp, Pure Data, SuperCollider, Eyesweb, Arena/Optitrack

Languages

Fluent in 3 languages

- Greek: native speaker
- German: fluent – German high school / Abitur exams
- English: fluent – Cambridge First Certificate, TOEFL and PhD/MSc in the UK

Music

Non-formal training

- Piano: 1987 – 1992 (private lessons)
- Workshops on Classical Indian singing by Zia Farididdin Dagar, Marianne Svasek, Nirmalya Dey, Bahauddin Dagar
- Numerous workshops at the Labyrinth Music Workshop run by Ross Daly between 2007-2010, such as:
 - Turkish Oud & Classical Turkish music
 - Singing (Classical Turkish and Afghan)
 - Percussion (Iranian tombak)