Emmanouil Benetos

Contact

School of Electronic Engineering

Information and Computer Science

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RESEARCH INTERESTS Audio signal processing, machine learning, music information retrieval, computational sound scene analysis

EMPLOYMENT

Queen Mary University of London, London, UK

Reader in Machine Listening

August 2022 - present

Senior Lecturer

October 2018 - July 2022

Lecturer

September 2015 - September 2018

Royal Academy of Engineering Research Fellow March 2015 - March 2020

• Host: School of Electronic Engineering and Computer Science

City, University of London, London, UK

University Research Fellow

January 2013 - March 2015

• Host: Department of Computer Science, School of Mathematics, Computer Science and Engineering (selected out of 77 applicants)

Queen Mary University of London, London, UK

Research Assistant

November 2012 to December 2012

• Project: MIReS (EU FP7)

• Principal investigator: Dr. Simon Dixon

University of Crete, Iraklion, Greece

Research Assistant

November 2008 to July 2009

• Host: Department of Computer Science

• Principal investigator: Prof. Yannis Stylianou

Aristotle University of Thessaloniki, Thessaloniki, Greece

Research Assistant

September 2005 to October 2007

• Projects: VISNET I (EU FP6), MUSCLE (EU FP6), Pythagoras II

• Principal investigator: Prof Constantine Kotropoulos

 $Software\ Developer$

June 2004 to July 2004

• Principal investigator: Prof Ioannis Pitas

EDUCATION

Queen Mary University of London, United Kingdom

PGCert Academic Practice (distinction)

September 2016 - July 2018

Ph.D., Electronic Engineering

September 2009 - December 2012

• Thesis title: Automatic music transcription exploiting temporal evolution

• Primary supervisor: Dr. Simon Dixon

• Secondary supervisor: Dr. Anssi Klapuri

Aristotle University of Thessaloniki, Greece

M.Sc. (hons), Informatics - Digital Media

October 2005 - June 2007

- Dissertation title: Music genre classification using tensor analysis
- Supervisor: Prof. Constantine Kotropoulos

B.Sc. (hons), Informatics

October 2001 - July 2005

- Dissertation title: Audio scene classification using the MPEG-7 framework
- Supervisor: Prof. Constantine Kotropoulos

FELLOWSHIPS, HONORARY AND VISITING POSTS

The Alan Turing Institute, London, UK

Turing Fellow

October 2018 - present

Higher Education Academy, London, UK

Fellow

July 2018 - present

Beijing University of Posts and Telecommunications, Beijing, China

International Academic Expert

November 2017

• Host: Key Laboratory of Universal Wireless Communications of Ministry of Education

City, University of London, London, UK

Honorary Visiting Fellow

May 2015 - November 2020

• Host: Department of Computer Science, School of Mathematics, Computer Science and Engineering

Royal Academy of Engineering, London, UK

Royal Academy of Engineering Research Fellow March 2015 - March 2020

British Library, London, UK

Project Worker

July 2014 - May 2017

• Host: Digital Scholarship Department, Collections Division

Télécom ParisTech, Paris, France

Visiting Scholar

November - December 2013

• Host: Audio, Acoustics and Waves Group, Signal and Image Processing department

City, University of London, London, UK

University Research Fellow

January 2013 - March 2015

• Host: Department of Computer Science, School of Mathematics, Computer Science and Engineering

Institute for Research and Coordination in Acoustics/Music (IRCAM), Paris, France

Visiting Researcher

November 2011

- Host: Music Representations Team (PI: Dr. Arshia Cont)
- Work carried out in acoustic scene classification and real-time automatic music transcription

Teaching

Queen Mary University of London, London, UK

Module Organiser & Lecturer

2020/21, 2021/22, 2022/23

- Module: Data Mining (ECS766). Duties: module leader, module prepatation, delivery, assessment (100% of module).
- Module: Electronic Engineering Mathematics 2 (ECS423). Duties: module prepatation, delivery, assessment (50% of module).
- Module: Music Informatics (ECS7006). Duties: module prepatation, delivery, assessment (50% of module).

Lecturer 2019/20

• Module: Music Informatics (ECS7006). Duties: module prepatation, delivery, assessment (50% of module).

Lecturer

2016/17, 2017/18, 2018/19

• Module: Signals and Information (ECS411). Duties: module prepatation, delivery, assessment (50% of module).

Guest Lecturer 2016/17

- Module: Music and Speech Modelling (ECS792). Duties: preparing and presenting material for one guest lecture.
- Module: Digital Signal Processing (ECS602U) / Fundamentals of DSP (ECS707P). Duties: preparing and presenting material for one guest lecture.

City, University of London, London, UK

 $Visiting\ Lecturer$

2017/18

• Module: Machine Learning (INM431). Duties: module preparation, delivery, exams (25% of module workload).

Visiting Lecturer

2016/17

• Module: Machine Learning (INM431). Duties: module preparation, delivery, exams (25% of module workload).

Visiting Lecturer

2015/16

• Module: Machine Learning (INM431). Duties: module preparation, delivery, exams (25% of module workload).

Lecturer 2014/15

• Module: Machine Learning (INM431). Duties: module preparation, delivery, exams (35% of module workload).

Lecturer 2013/14

• Module: Digital Signal Processing (IN3031 / INM424). Duties: module preparation, delivery, and assessment (35% of module workload).

Course co-designer

2013/14

• Course: MSc Data Science (based at Department of Computer Science). Duties: co-wrote course application, wrote Big Data module specifications.

Guest Lecturer 2012/13

• Module: Music Technology for Games (INM378). Duties: delivery of lecture and lab (1 week).

Queen Mary University of London, London, UK

Teaching Assistant

2010/11

• Module: Advanced Transform Methods (ELEM018). Duties: lab assistant, marking lab assignments, invigilator, final exam marking.

RESEARCH GRANTS

Resource-efficient machine listening

October 2023 to July 2024

• Role: Principal Investigator (RAEng/Leverhulme Trust Research Fellow); Funding: Royal Academy of Engineering; Scheme: RAEng/Leverhulme Trust Research Fellowships; Funded value: £52,455, Grant Ref: LTRF2223-19-106

Cross-cultural relationships between speech and song January 2023 to December 2025

 Role: Associate Investigator; Funding: Royal Society of New Zealand; Scheme: Marsden Fund Fast-Start Grant; Funded value: 360,000 NZ\$; Grant ref: 22-VUW-078

Deep learning technologies for multi-instrument automatic music transcription February 2022 to October 2023

• Role: Principal Investigator; Funding: Huawei Technologies Düsseldorf; Funded value: £252,000

Towards complete music transcription: converting performance MIDI to quantized MIDI October 2021 to January 2022

• Role: Principal Investigator; Funding: Bytedance UK; Funded value: £8,125

Unsupervised detection of sound events for complex audio March 2021 to March 2023

• Role: Principal Investigator; Funding: Royal Society; Scheme: International Exchanges; Funded value: £3,800; Grant ref: IEC/NSFC/201382

Automatic guitar tutoring prototype March 2021 to September 2021

• Role: Principal Investigator; Funding: Algorivm Ltd and EPSRC; Scheme: QMUL EPSRC/STFC IAA Large Grants Competition Programme; Funded value: £11,286

Graph Neural Networks for Explainable Artificial Intelligence (GraphNEx) February 2021 to January 2024

• Role: Co-Investigator; Funding: EPSRC; Scheme: CHIST-ERA; Funded value: £293,434 (QMUL); Grant ref: EP/V062107/1

Development of next generation music recognition algorithm for content monitoring November 2019 to June 2021

• Role: Co-Investigator; Funding: Innovate UK; Scheme: Innovate UK Smart Grants; Funded value: £148,037 (QMUL); Grant ref: 30863

UKRI Centre for Doctoral Training in Artificial Intelligence and Music **July 2019** to December 2027

• Role: Co-Investigator; Funding: UKRI; Scheme: UKRI Centres for Doctoral Training in Artificial Intelligence; Funded value: £6,240,207; Grant ref: EP/S022694/1

Data-driven quality prediction for digitally restored audio archives **September 2018 to August 2021**

• Role: Co-Investigator; Funding: Science Foundation Ireland; Scheme: Insight-SFI PhD Recruitment Scheme; Funded value: €166,544; Grant ref: SFI/12/RC/2289

New Frontiers in Music Information Processing (MIP-Frontiers) April 2018 to March 2022

• Role: Co-Investigator; Funding: European Commission; Scheme: European Training Networks; Funded value: €819,863 (QMUL), €3,937,088 (total); Grant Ref: 765068

Integrating sound and context recognition for acoustic scene analysis April 2018 to June 2019

• Role: Principal Investigator; Funding: EPSRC; Scheme: First Grant; Funded value: £97,839, Grant Ref: EP/R01891X/1

Automatic transcription of polyphonic music recordings August 2016 to August 2017

• Role: Principal Investigator; Funding: Royal Academy of Engineering; Scheme: Newton Research Collaboration Programme; Funded value: £23,759; Grant Ref: NRCP1617/5/46

Polyfoni-X-Score

September 2015 to November 2016

• Role: Co-Investigator; Funding: Industry (DoReMIR Music Research AB); Funded value: £77,445

A Machine Learning Framework for Audio Analysis and Retrieval March 2015 to March 2020

 Role: Principal Investigator (RAEng Research Fellow); Funding: Royal Academy of Engineering; Scheme: RAEng Research Fellowships; Funded value: £404,471, Grant Ref: RF/128

An Integrated Audio-Symbolic Model of Music Similarity (ASyMMuS) **September 2014 to October 2015**

• Role: Co-Investigator; Funding: AHRC; Scheme: Development Grants; Funded value: £36,607 (City, University of London), £61,570 (Total), Grant Ref: AH/M002454/1

Digital Music Lab - Analysing Big Music Data (DML) **January 2014 to March 2015**

• Role: Co-Investigator; Funding: AHRC; Scheme: Large Grants; Funded value: £239,876 (City, University of London), £451,750 (Total), Ref: AH/L01016X/1

SCHOLARSHIPS, SMALL & INTERNAL GRANTS, AWARDS

NVIDIA Data Science GPU Grant

September 2019

Awarded a Titan V GPU through the NVIDIA Data Science GPU Grant Program (RRP £3,000).

Alan Turing Institute - Events and Engagement seed funding September 2018

• £3,000 for organising the 2nd International Workshop on Vocal Interaction inand-between Humans, Animals and Robots (VIHAR 2019). Lead applicant: Dan Stowell.

Outstanding Contribution to ISMIR Award

September 2018

• Award given by the International Society for Music Information Retrieval

Research Performance Award

January 2018

 Award given by the Faculty of Science & Engineering of Queen Mary University of London

2017 British Library Labs Research Award

October 2017

• Award for project 'A large scale comparison of world music corpora with computational tools' (team: Maria Panteli, Emmanouil Benetos, Simon Dixon).

NVIDIA GPU Grant

September 2017

• Awarded a Titan Xp GPU through the NVIDIA GPU Grant Program (RRP £1,149).

Centre for Digital Music Platform Grant

February 2016

• Grant (£1.8k) for organising the 2016 Workshop on Auditory Neuroscience, Cognition and Modelling (w. M. Pearce, Y. Blokland).

Centre for Digital Music Platform Grant

September-October 2015

• Mini-project (£3.4k) for organising the MIREX 2015 Music/Speech Classification and Detection Task.

Automatic segmentation of audio recordings to speech and music April-May 2015

• Role: Co-Investigator; Funding: City University London Research Pump-Priming Fund: Budget: £5,940

A Deep Learning Framework for Automatic Music Transcription April-July 2014

• Role: Principal Investigator; Funding: City University London Research Pump-Priming Fund; Budget: £5,768

Télécom Paris Tech visiting researcher travel grant for project entitled "Source adaptation in template-based spectrogram factorization models for multi-pitch detection", $\leq 2,500$. December 2013

Best reviewer award at ISMIR 2013, Curitiba, Brazil

November 2013

SoundSoftware Reproducible Research Prize for a Conference Submission for EU-SIPCO 2013 paper entitled "A Database and Challenge for Acoustic Scene Classification and Event Detection" 2013

7Digital and sonicAPI Best Hack Awards, Music Hack Day Paris

April 2013

Centre for Digital Music Platform Grant

November 2011

• Grant given for one-month research visit at IRCAM, Paris, France

QMUL Central Research Fund

October 2011

• Grant given for presentation at WASPAA 2011, New Paltz, NY, USA

ISMIR 2010 Student Travel Award

August 2010

• Grant given for presentation at ISMIR 2010, Utrecht, Netherlands

Westifeld Trust

September 2009 - September 2012

• QMUL Research studentship (award based on merit)

Alexander S. Onassis Public Benefit Foundation September 2006 to July 2007

• Scholarship for postgraduate studies (award based on merit)

State Scholarships Foundation

September 2004 to June 2005

• Scholarship for Outstanding Achievement in Sciences supported by the Papamichailides Foundation (awarded through contest)

Enterprise

Academic Co-Founder, Tonz Inc., Canada May 2020 - present October 2014 - March 2015 Consultant, Tido Enterprise GmbH, Germany Consultant, DoReMIR Music Research AB, Sweden December 2011 to December 2013

Consultant, AllegroIQ Ltd, Hong Kong

January 2011 to June 2011

PhD Supervision Antonella Torrisi, Queen Mary University of London Topic: Computational analysis of chick vocalisations

PRIMARY/JOINT SUPERVISOR)

Aditya Bhattacharjee, Queen Mary University of London

Topic: Self-supervision in audio fingerprinting

Yinghao Ma, Queen Mary University of London

Topic: Self-supervised learning for music information retrieval

Jinhua Liang, Queen Mary University of London

Topic: AI for everyday sounds

Jiawen Huang, Queen Mary University of London Topic: Lyrics alignment for polyphonic music

Inês Nolasco (co-supervised with Huy Phan and Dan Stowell), Queen Mary University of London

Topic: Automatic acoustic identification of individual animals in the wild

Shubhr Singh (co-supervised with Huy Phan and Dan Stowell), Queen Mary University of London

Topic: Novel mathematical methods for audio based deep learning

Ilaria Manco (co-supervised with George Fazekas), Queen Mary University of London Topic: Multimodal deep learning for music information retrieval

Lele Liu, Queen Mary University of London

Topic: Automatic music score transcription with deep neural networks

Arjun Pankajakshan, Queen Mary University of London Topic: Sound recognition via audio sequence modelling

Carlos Lordelo (co-supervised with Simon Dixon), Queen Mary University of London and DoReMIR Music Research AB (Sweden)

Topic: Improving polyphonic transcription through source separation and instrument recognition

Changhong Wang (co-supervised with Elaine Chew), Queen Mary University of London

Completed November 2021

Topic: Scattering transform for playing technique recognition

Adrien Ycart, Queen Mary University of London Completed October 2020 Topic: Music language models for automatic music transcription

Bhusan Chettri (co-supervised with Bob Sturm), Queen Mary University of London Completed August 2020

PhD Thesis: Voice biometric system security: design and analysis of countermeasures for replay attacks

PhD Supervision (as secondary supervisor)

PhD Supervision Peiling Yi, Queen Mary University of London

Topic: Youth Cyberbullying Detection Across Different Social Media Platforms

Chin-Yun Yu, Queen Mary University of London

Topic: Analysing and controlling extreme vocal expression using differentiable DSP and neural networks

Christopher Mitcheltree, Queen Mary University of London

Topic: Representation learning for audio effect and synthesizer modulations

Yisu Song, Queen Mary University of London

Topic: Machine learning for physical models of sound synthesis

Huan Zhang, Queen Mary University of London

Topic: Computational modelling of expressive piano performance

Andrew Edwards, Queen Mary University of London

Topic: Computational models for jazz piano: transcription, analysis, and generative modeling

Xiaowan Yi, Queen Mary University of London

Topic: Composition-aware music recommendation system for music production

Dimitrios Stoidis, Queen Mary University of London

Topic: Protecting voice biometrics with disentangled representations of speech

Saurjya Sarkar, Queen Mary University of London

Topic: Time-domain Music Source Separation: Developing Novel Tools for Music Production

Yukun Li, Queen Mary University of London

Topic: Computational comparison between different styles of singing voice in terms of pitch

Vinod Subramanian, Queen Mary University of London

Topic: Note level audio features for understanding and visualising musical performance

Edward Hall, Queen Mary University of London

Topic: Probabilistic Modelling of Thematic Development and Structural Coherence in Music

Alessandro Ragano, University College Dublin

Topic: Data-driven quality prediction for digitally restored audio archives
Completed December 2022

Rémi de Fleurian, Queen Mary University of London

Topic: Predicting pleasurable moments in music
Completed October 2022

Emir Demirel, Queen Mary University of London

Topic: Deep neural networks for automatic lyrics transcription ${f Completed\ April\ 2022}$

Marco A. Martinez Ramirez, Queen Mary University of London Completed January 2021

PhD Thesis: Deep learning for audio effects modeling

Saumitra Mishra, Queen Mary University of London Completed October 2020 PhD Thesis: Interpretable machine learning for machine listening

Maria Panteli, Queen Mary University of London Completed April 2018
PhD Thesis: Computational analysis of world music corpora

RESEARCH STAFF SUPERVISION Sungkyun Chang, Queen Mary University of London (RA) July 2022 - present

Callum Goddard, Queen Mary University of London (RA) March - August 2021 and March - August 2022

2018 Dr Helen Bear, Queen Mary University of London (PDRA for EPSRC project April 2018 - June 2019 EP/R01891X/1) Dr Daniel Wolff, Queen Mary University of London (PDRA for C4DM Platform September - October 2015 Grant-funded project) Siddharth Sigtia, City University London (RA for Pump Priming Fund project) April - July 2014 РнD Ioannis Vasilakis, Queen Mary University of London September 2022 - present INDEPENDENT Assessor Ningzhi Wang, Queen Mary University of London September 2022 - present Zhengqi Chen, Queen Mary University of London October 2022 - present May 2022 - present Soumya Vanka, Queen Mary University of London Jingjing Tang, Queen Mary University of London April 2021 - present Amani Sabri Abumansour, Queen Mary University of London January 2021 present Yin-Jyun Luo, Queen Mary University of London October 2020 - present Christian Steinmetz, Queen Mary University of London September 2020 present Marco Comunità, Queen Mary University of London December 2019 - present Mary Pilataki-Manika, Queen Mary University of London November 2019 present Ashish Alex, Queen Mary University of London July 2019 - present Elizabeth Wilson, Queen Mary University of London January 2019 - present Ruchit Agrawal, Queen Mary University of London October 2018 - March 2022 Saumitra Mishra, Queen Mary University of London January 2018 - May 2018 Daniel Stoller, Queen Mary University of London August 2016 - July 2020 Gnostothea Veroniki Morfi, Queen Mary University of London August 2015 -June 2019 Pablo Alvarado Duran, Queen Mary University of London March 2015 - May 2020 Qiuqiang Kong, Queen Mary University of London May 2015 - December 2015 Host - Visiting Emilian Postolache, (Sapienza University of Rome, Italy) May - August 2023 RESEARCHERS Charilaos Papaioannou, (National Technical University of Athens, Greece) March - May 2023

Inês Nolasco, Queen Mary University of London (RA)

October - November

Jose J. Valero-Mas, (University of Alicante, Spain) May - July 2015, October - November 2016, and May - September 2022

Yangxiong Li (South China University of Technology, China) May-September 2022

Ester Vidaña Vila (Universitat Ramon Llull, Spain)

June-July 2020

Hideo Daikoku (Keio University, Japan) December 2019

Roberto Piassi Passos Bodo (University of São Paulo, Brazil) September 2019 - February 2020

Prof. Ye Wang (National University of Singapore, Singapore) August-September 2019

Felix Gontier (École centrale de Nantes, France)

November 2018

Qing Zhou (Xi'an Jiaotong University, China) October 2017 - March 2018

Andrew McLeod (University of Edinburgh, UK)

August 2017

Mina Mounir (KU Leuven, Belgium) May 2017

Dr Rodrigo Schramm (Universidade Federal do Rio Grande do Sul, Brazil) ${f August}$ 2016 - ${f August}$ 2017

Juan José Bosch Vicente (Universitat Pompeu Fabra, Spain) September - December 2015

PROJECT SUPERVISION Undergraduate final year projects: 11 in total (7 in 2021/22; 4 in 2022/23) MSc projects: 16 in total (2 in 2016/17; 3 in 2017/18; 2 in 2019/20; 1 in 2020/21; 8 in 2021/22)

MSc by research projects: 1 in total (1 in 2021/22)

EXAMINER PhD External Examiner, Yann Teytaut, IRCAM / Sorbonne University July 2023

PhD External Examiner, Hemlata Tak, EURECOM / Sorbonne University May 2023

External Examiner, MSc Data Science, City, University of London March 2023 - present

Course Approval External Advisor, BSc (Hons) Creative Computing & BA (Hons) Creative Technology, Norwich University of the Arts May 2022

PhD Internal Examiner, Benjamin Marshall, Birkbeck, University of London ${\bf May}$ 2022

PhD External Examiner, Gerardo Roa Dabike, University of Sheffield April 2022

PhD External Examiner, Eduardo Fonseca, Pompeu Fabra University **December 2021**

Ph
D External Examiner, Roberto Piassi Passos Bodo, University of São Paulo
 ${\bf July~2021}$

PhD External Examiner, Xavier Favory, Pompeu Fabra University March 2021

PhD External Examiner, Miguel Ángel Román García, University of Alicante January 2021

MSc External Examiner, Nicolas Figueiredo, University of São Paulo **December 2020**

PhD External Examiner, Marc C. Green, University of York October 2020

PhD External Examiner, Mina Mounir, KU Leuven May 2020

PhD External Examiner, Anastasios Vafeiadis, De Montfort University April 2020

PhD External Examiner, Pierre Beauguitte, Technological University Dublin October 2019

PhD External Examiner, Jose Javier Valero-Mas, University of Alicante July 2017

MSc External Examiner, Sofia-Elpiniki Giannikaki, University of Crete March 2015

CITATIONS

Total citation count: 4790; h-index: 34 (source: Google Scholar)

ACADEMIC SERVICE 24th International Society for Music Information Retrieval Conference (ISMIR 2023) November ${f 2023}$

• Tutorial program co-chair

2022 Intelligent Sensing Winter School

• Co-organiser

EURASIP JASM special issue on Recent advances in computational sound scene analysis 2022

• Lead guest editor

2020 Intelligent Sensing Summer School

September 2020

December 2022

Co-organiser

27th European Signal Processing Conference (EUSIPCO 2019) September 2019

• Special session co-organiser. Session title: Music Information Processing

2nd International Workshop on Vocal Interactivity in-and-between Humans, Animals and Robots (VIHAR 2019)

August

• Website Chair, Scientific Review Committee Member

19th International Society for Music Information Retrieval Conference (ISMIR 2018) September 2018

• Programme co-chair

Workshop on Detection and Classification of Acoustic Scenes and Events 2017 (DCASE 2017)

September 2017

• Programme co-chair

IEEE Challenge on Detection and Classification of Acoustic Scenes and Events 2016 (DCASE 2016)

September 2015 - September 2016

• Challenge and workshop co-organiser

 \bullet Duties: proposal co-author, coordinator of Task 2 - Synthetic audio sound event detection

16th International Conference on New Interfaces for Musical Expression (NIME 2016) July 2016

• Proceedings editor

2016 Workshop on Auditory Neuroscience, Cognition and Modelling **February** 2016

• Workshop co-organiser

IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2016) October 2015

• Special session co-organiser. Session title: Acoustic Scene and Event Analysis in Multisource Environments

MIREX 2015 Music/Speech Classification and Detection Task October 2015

• Task co-captain

Listening in the Wild 2015 Workshop

August 2015

• Organising committee member

ASyMMuS Workshop on Audio-Symbolic Music Similarity Modelling **July 2015**• Organising committee member

IEEE Challenge on Detection and Classification of Acoustic Scenes and Events 2013 July 2012 to October 2013

- Challenge co-organiser
- Duties: proposal co-author, dataset creation, baseline system creation, metrics implementation, evaluation, website/maling list maintenance

QMUL IEEE Student Branch Jan

January 2012 to December 2012

- Student Branch Chair
- Duties: Organise IEEE-related events, secure branch funding, submit budget reports, preside branch meetings

9th Int. Symposium Computer Music Modeling and Retrieval (CMMR) **June 2012**

- Organizing committee member
- Duties: creation of conference proceedings and programme guide

IEEE UKRI Student Branch Congress 2011

September 2011

- Congress secretary and content manager
- Duties: registration, creating promotional materials and sponsorship documents

Centre for Digital Music, QMUL

April 2010 to November 2011

- Research seminar coordinator
- Duties: liaise with seminar speakers, book rooms, create and send seminar announcements, record and edit seminar videos

LEADERSHIP OF PROFESSIONAL ORGANISATIONS Member, EURASIP Acoustic, Speech and Music Signal Processing Technical Area Committee (ASMSP TAC)

January 2023 - December 2025

Secretary, International Society for Music Information Retrieval (ISMIR) **January** 2022 - December 2024

Member & Chair of Education subcommittee, IEEE Audio and Acoustic Signal Processing Technical Committee (AASP TC)

January 2022 - December 2024

Committee member, IEEE UK and Ireland Signal Processing Chapter ${\bf September}$ 2017 - ${\bf present}$

Editorial Service IEEE/ACM Transactions on Audio, Speech, and Language Processing August 2022 - present

• Associate Editor

Pattern Recognition Letters (Elsevier)

June 2019 - August 2022

• Associate Editor

EURASIP Journal on Audio, Speech, and Music Processing February 2018 - present

• Associate Editor

UNIVERSITY & INSTITUTE SERVICE Director of Research, School of EECS, QMUL

2023 - present

Deputy Director and Research Director, UKRI Centre for Doctoral Training in Artificial Intelligence and Music, QMUL 2023 - present

Deputy Director of Research, School of EECS, QMUL

2022 - 2023

QMUL-Turing Liaison Committee Member, QMUL

2022 - present

AI and Data Modelling Leadership Team Member, Faculty of Science & Engineering, QMUL ${\bf 2022}$ - ${\bf present}$

Turing Skills Group member, The Alan Turing Institute

2021 - present

Open Access / Open Science Coordinator, School of EECS, QMUL 2020 - 2022

Admissions Officer, UKRI Centre for Doctoral Training in Artificial Intelligence and Music, QMUL 2019 - 2022

REVIEWING

Reviewer in international journals:

• IEEE/ACM TASLP; IEEE SPL; IEEE TSP; IEEE TMM; IEEE MultiMedia; IEEE JSTSP; IEEE TETCI; IEEE TPAMI; PLOS ONE; JASA (AIP); JASA-EL; JASA (T&F); JAES; Frontiers Digital Humanities; Digital Signal Processing (Elsevier); EURASIP JASP; EURASIP JASMP; TISMIR; PRL (Elsevier); CMJ (MIT Press); JNMR (T&F); Radioengineering; Advances in Multimedia; ACM JOCCH; ACM TIST, Applied Acoustics (Elsevier); J. Franklin Institute; Computer Speech & Language; Empirical Musicology Review; The Computer Journal (OUP); Physics Today; Scientific Reports; PMLR

 ${\it Meta-reviewer\ in\ international\ conferences:}$

• ISMIR (2015-23); IEEE ICASSP (2023); IEEE WASPAA (2023); EUSIPCO (2023)

Reviewer in international conferences:

ISMIR (2011-14); IEEE ICASSP (2013,15-21); IEEE WASPAA (2011,15,17,19);
 EUSIPCO (2007,09,12-15,17-20); ISCAS (2009); DSP (2011); AES Semantic Audio (2011,14,17); CMMR (2012); SMC (2010-14,16-17); IJCAI (2013); AAAI (2014); FMA (2014-20); MCM (2015); AAWM (2016,18); MML (2016-17); Audio Mostly (2017), QoMEX (2020); DSLW (2021); IJCNN (2020)

Reviewer for research proposals:

- European Research Council (ERC)
- Engineering and Physical Sciences Research Council (EPSRC, UK) Member, EPSRC Peer review college
- Arts and Humanities Research Council (AHRC, UK) Member, AHRC Peer review college
- Royal Academy of Engineering (RAEng, UK)
- National Science Foundation (NSF, USA)
- National Research Agency (ANR, France)
- Hellenic Foundation for Research & Innovation (HFRI, Greece)
- Belgian Federal Science Policy Office (BELSPO, Belgium)
- Linz Institute of Technology (LIT, Austria)
- Natural Sciences and Engineering Research Council (NSERC, Canada)
- Vienna Science and Technology Fund (WWTF, Austria)
- Swiss Data Science Center (SDSC, Switzerland)
- Chilean National Agency for Research and Development (ANID, Chile)

Professional Memberships

Senior Member, IEEE & IEEE Signal Processing Society

Affiliate member, IEEE Technical Committee on Machine Learning for Signal Processing

Member, IEEE CIS Task Force on Computational Audio Processing

Member, International Society for Music Information Retrieval (ISMIR)

Member, European Association for Signal, Speech, and Image Processing (EURASIP)

Member, UK Acoustics Network (UKAN)

Member, Data Science and Digital Humanities interest group, The Alan Turing Institute

Member, EPSRC Peer Review College

Working Group Member, International Federation for Information Processing (IFIP) WP14.10 – Sound and Music Computing

Fellow, Digital Environment Research Institute (DERI), Queen Mary University of

ARTISTIC SKILLS

London

Diploma of the Associated Board of the Royal Schools of Music in Piano Performance, December 2010.

B.Mus. in Piano Performance by the New Conservatory of Thessaloniki, subject to the Greek Ministry of Culture, July 2009.

Grade 5 degree of the Associated Board of the Royal Schools of Music in Music Theory, 2001.

KEYNOTE TALKS

- E. Benetos, "Music informatics & computational musicology: A case study in automatic music transcription," Keynote talk at *First Annual TROMPA Workshop for Music Scholars*, London, UK, Apr. 2019.
- E. Benetos, "Automatic transcription of world music collections," Keynote talk at 8th International Workshop on Folk Music Analysis, Thessaloniki, Greece, June 2018.
- E. Benetos, "Music informatics & computational musicology: A case study in automatic music transcription," Keynote talk at *Symposium for Digital Musicology*, London, UK, Sep. 2017.

INVITED TALKS

- E. Benetos, "Learning methodologies for music and audio data," BAAI Music & Audio Processing Workshop invited talk, June 2023.
- E. Benetos, "Learning methodologies for music and audio data," *ByteDance SAMI* invited talk, October 2021.
- E. Benetos, "Learning methodologies for music and audio data," invited talk, *Huawei MTI Forum*, March 2021.
- E. Benetos, "Machine learning for machine listening," invited talk, *Institute of Applied Data Science colloquium*, London, UK, November 2019.
- E. Benetos, "The Digital Music Lab project: summary and perspectives," invited talk, Digital Musicology and Libraries: Challenges and Opportunities study day, London, UK, July 2019.
- E. Benetos, "Signal processing methods for sound recognition," invited talk, School of Computing, National University of Singapore, Singapore, January 2019.
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- E. Benetos, "Automatic Music Transcription: Representations and Categorical (mis)Conceptions," Fifth International Conference on Analytical Approaches to World Music, Thessaloniki, Greece, June 2018.
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- E. Benetos, S. Cherla, and D. Wolff, "The Music Informatics Research Group (MIRG)", Music Tech Fest, London, UK, May 2013.
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- S. Sarkar, L. Thorpe, E. Benetos, M. Sandler, "Leveraging synthetic data for improving chamber ensemble separation," in *IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA)*, accepted.
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