

Curriculum Vitae

PERSONAL INFORMATION

Name (First, Last): Hüseyin Hacıhabiboğlu
ResearcherID: <http://www.researcherid.com/rid/P-8638-2014>
ORCID: 0000-0002-5399-0162
Date of birth: 16.06.1978
Web site: <http://www.hacihabiboglu.org>

EDUCATION

2004 Doctor of Philosophy in Computer Science, Queen's University Belfast, UK (carried out at the interdisciplinary Sonic Arts Research Centre)
 2001 Master of Science (by Research), Electrical and Electronic Engineering, University of Bristol, UK Digital Music Research Group (the research group is now defunct)
 2000 Bachelor of Science (Hons), Electrical and Electronic Engineering, Middle East Technical University (METU), specialisation in signal processing and computer hardware

CURRENT POSITION

2015 – Associate Professor of Signal Processing and Head of Department of Modelling and Simulation, Graduate School of Informatics, Middle East Technical University, Turkey

PREVIOUS POSITIONS

2012 – 2017 Head of Department of Modelling and Simulation, Graduate School of Informatics, Middle East Technical University, Turkey
 2012 – 2014 Assistant Professor, Department of Modelling and Simulation, Graduate School of Informatics, Middle East Technical University (METU), Turkey
 2011 – 2012 TÜBİTAK 2232 Research Fellow, Graduate School of Informatics, Middle East Technical University (METU), Turkey
 2008 – 2011 Senior Postdoctoral Research Fellow, Centre for Digital Signal Processing Research, King's College London, UK
 2004 – 2008 Postdoctoral Research Fellow, Centre for Communication Systems Research, University of Surrey, UK

FELLOWSHIPS AND AWARDS

2015 Middle East Technical University Academic Performance Award (awarded to top 20% of academic staff annually based on the evaluation of research and teaching activities of the preceding three years)
 2012 – Senior Member of the IEEE
 2001 – 2004 Queen's University Belfast SPUR Studentship
 2000 – 2001 British Chevening Scholarship
 2000 – 2001 Turkish Education Foundation Graduate Scholarship

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2012 – Six MSc and three PhD students currently being (co-)supervised on audio signal processing, game technologies and auditory cognition. 14 M.Sc. students on audio signal processing graduated since 2012.
 2008 – 2011 Main supervisor for two MSc students (Dr Saul Mate-Cid, now at SATRA Ltd., UK and Ms Ilakya Somasundaram) and (unofficial) co-supervisor/mentor for a doctoral student (Dr Enzo De Sena, now Lecturer at University of Surrey) all on audio signal processing at King's College London, UK

ORGANISATION OF SCIENTIFIC MEETINGS

2014 – Co-organisation: Special Session of Microphone Array Signal Processing, IEEE Conference on Applications of Signal Processing (SIU), Trabzon, Turkey
 2012 – Co-organisation of the IEEE SPS Summer School on Game Audio, METU, Ankara, Turkey

INSTITUTIONAL RESPONSIBILITIES

- 2018 – Advisor to Head of Graduate School of Informatics
- 2012 – Doctoral and masters thesis evaluation board memberships at Departments of Modelling and Simulation, Information Systems, Cognitive Science, Information Systems, Industrial Design, CEIT
- 2012 – 2017 Head of Department, Department of Modelling and Simulation, Graduate School of Informatics, Middle East Technical University, Turkey (present appointment is for the second 3-year term)
- 2012 – 2017 Member of the Institute Board, Graduate School of Informatics, Middle East Technical University, Turkey
- 2012 – Ethics Committee, Graduate School of Informatics, Middle East Technical University, Turkey

COMMISSIONS OF TRUST

- 2019 – Member : Turkish Scientific and Technological Research Council (TUBITAK) International Relations Committee (UIDB) Advisory Board
- 2018 Member : Turkish Education Foundation (TEV) Scholarship Evaluation Board
- 2018 – Member : UK Research and Innovation Council (UKRI) Peer Review College
- 2016 – Reviewer : EU H2020 Projects (PERGAMON, ORPHEUS, VIRTUALLMUSIC)
- 2013 – Expert and rapporteur: EU FP7 and H2020 programmes in the creativity domain
- 2013 – Expert and panel member: Turkish Scientific and Technological Research Council (TUBITAK), 1003, 1501, 1507, 1512 programmes
- 2004 – Reviewer: Proceedings of the IEEE, IEEE Transactions on Signal Processing, IEEE Signal Processing Letters, IEEE Transactions on Audio, Speech and Language Processing, EURASIP Journal on Applied Signal Processing, Acta Acustica united with Acustica, Applied Acoustics, IEEE Transactions on Circuits and Systems, Cognitive Computation (Springer), Signal Processing (Elsevier), Digital Signal Processing (Elsevier)

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

IEEE (Senior Member), IEEE SPS (Member), AES (Member), Turkish Acoustical Society (Member), European Acoustics Association (Member), IEEE Turkey Section (Associate Coordinator of Student Activities)

Associate Editor, IEEE/ACM Transactions on Audio, Speech and Language Processing

MAJOR COLLABORATIONS

- Prof. Zoran Cvetkovic (King's College London, UK): Several journal articles in high-impact journals on audio signal processing, co-inventor on two US patents on audio signal processing and microphone arrays.
- Prof. Ahmet M Kondo (Loughborough University, UK): Several journal articles in high-impact journals on audio signal processing, co-inventor on one US patent and one PCT patent application on audio DSP.
- Prof. Julius O. Smith (Stanford University, USA;): A major journal article in IEEE/ACM Transactions on Audio, Speech and Language Processing on artificial reverberation.
- Mr James Johnston (IEEE Fellow, USA; co-inventor of MP3): Remote collaboration during the development of the perceptual sound field reconstruction method at King's College London.
- Dr Enzo De Sena (University of Surrey, UK): Several journal articles in high-impact journals on audio signal processing, co-inventor on two US patents on audio signal processing.

TRACK RECORD

As of 05 January 2020, my research metrics are as follows:

- h-index = 14, 604 total citations on Google Scholar
- h-index = 8, 199 total citations of 33 documents on Web of Science

LIST OF PUBLICATIONS

JOURNAL ARTICLES

- [J16] Çöteli, M. B., Olgun O., and **Hacıhabiboğlu, H.** "Multiple Sound Source Localization With Steered Response Power Density and Hierarchical Grid Refinement." *IEEE/ACM Transactions on Audio, Speech and Language Processing (TASLP)* 26.11 (2018): 2215-2229.
- [J15] **Hacıhabiboğlu, H.**, De Sena, E., Cvetkovic, Z., Johnston, J., and Smith, J. O. (2017) "Perceptual Spatial Audio Recording, Simulation and Rendering" *IEEE Signal Processing Magazine*, 34(3), pp. 36-54, May 2017.
- [J14] De Sena, E., **Hacıhabiboğlu, H.**, Cvetkovic, Z., and Smith, J. O. "Efficient synthesis of room acoustics via scattering delay networks" *IEEE/ACM Trans. Audio, Speech, and Language Process.*, 23(9), pp. 1478-1492, Sep 2015.
- [J13] **Hacıhabiboğlu, H.** (2014) "Theoretical analysis of spherical microphone arrays for acoustic intensity measurements" *IEEE/ACM Trans. Audio, Speech, and Language Process.*, 22(2), pp. 465 - 476, Feb 2014
- [J12] De Sena, E., **Hacıhabiboğlu, H.**, and Cvetkovic, Z., (2013) "Analysis and design of multichannel systems for perceptual sound field reconstruction" *IEEE Trans. Audio, Speech, and Language Process.*, 21(2), pp. 1653 - 1665, Aug 2013.
- [J11] **Hacıhabiboğlu, H.**, and Cvetkovic, Z., "Multichannel dereverberation theorems and robustness issues", *IEEE Trans. Audio, Speech, and Language Process.*, 20(2), pp. 676-689, Feb 2012.
- [J10] De Sena, E., **Hacıhabiboğlu, H.**, and Cvetkovic, Z., "On the design and implementation of higher-order differential microphones" *IEEE Trans. Audio, Speech, and Language Process.*, 20(1), pp. 162-174, Jan 2012.
- [J09] **Hacıhabiboğlu, H.** "Allpass variable fractional delay filters using pole loci interpolation", *IET Elect. Lett.*, 46(8), pp. 558- 559, 15 April 2010.
- [J08] **Hacıhabiboğlu, H.**, Günel, B., and Cvetkovic, Z., "Simulation of directional microphones in digital waveguide mesh-based models of room acoustics", *IEEE Trans. Audio, Speech, and Language Process.*, 18(2), pp. 213-223, February 2010.
- [J07] **Hacıhabiboğlu, H.**, and Murtagh, F., (2008), "Perceptual simplification for model-based binaural room auralisation", *Applied Acoustics*, 69(8), pp. 715-727, August 2008.
- [J06] **Hacıhabiboğlu, H.**, Günel, B., and Kondo A. M., (2008) "Time-domain simulation of directive sources in 3D digital waveguide mesh-based acoustical models", *IEEE Transactions on Audio, Speech, and Language Processing*, 16(5), pp. 934-946, July 2008.
- [J05] Günel, B., **Hacıhabiboğlu, H.**, and Kondo A. M., (2008) "Acoustic source separation of convolutive mixtures based on intensity vector statistics", *IEEE Trans. Audio, Speech, and Language Processing*, 16(4), pp. 748-756, May 2008
- [J04] **Hacıhabiboğlu, H.**, Günel, B., and Kondo A. M., (2008) "On the accuracy of first-order finite difference approximations to numerical derivatives in multidimensional digital waveguide mesh topologies", *IEEE Signal Process. Lett.*, vol. 15, pp 9-12, January 2008.
- [J03] **Hacıhabiboğlu, H.**, Günel, B., and Kondo A. M., (2007) "Analysis of root displacement interpolation method for tunable allpass fractional-delay Filters", *IEEE Trans. on Signal Process.*, 55(10), pp.

4896-4906.

- [J02] Günel, B., **Hacıhabiboğlu, H.**, and Kondo A. M., (2006), "Wavelet-packet based passive analysis of sound fields using a coincident microphone array", *Appl. Acoust.*, 68(7), pp. 778-796.
- [J01] **Hacıhabiboğlu, H.**, and Murtagh, F., (2006), "An observational study of the precedence effect", *Acta Acustica united with Acustica*, 90(3), pp. 440-456, May/June 2006.

PATENTS

- [P3] De Sena, E., **Hacıhabiboğlu, H.**, Cvetkovic, Z., "Electronic device with digital reverberator and method" US Patent 8908875 B2
- [P2] De Sena, E. **Hacıhabiboğlu, H.**, Cvetkovic, Z., "Microphone Array" US Patent 8976977 B2
- [P1] Günel B., **Hacıhabiboğlu, H.**, Kondo A. M., "Acoustic source separation", US Patent 9093078 B2

BOOK CHAPTERS

- [BC3] **Hacıhabiboğlu, H.**, (2017) "Procedural Synthesis of Gunshot Sounds based on Physically-motivated Models" in *Game Dynamics: Best Practices in Procedural and Dynamic Game Content Generation*, Oliver Korn, Newton Lee (Eds.), Springer-Verlag, 2017.
- [BC2] **Hacıhabiboğlu, H.**, (2014), "Spatial and 3D Audio Systems", in *Encyclopedia of Information Science and Technology*, 3rd Ed., Eds. Ari-Veikko Anttiroiko et al., IGI Global, pp.6020-6029, July 2014 (ISBN13: 9781466658882, ISBN10: 1466658886)
- [BC1] Günel, B., and **Hacıhabiboğlu, H.**, (2010) "Sound source localization: Conventional methods and intensity vector direction exploitation", in *Machine Audition: Principles, Algorithms and Systems*, Ed. Wenwu Weng, IGI Global, pp. 126-161, August 2010, (ISBN13: 9781615209194, ISBN10: 1615209190)

INTERNATIONAL CONFERENCES

- [C38] Erdem, E., De Sena, E., **Hacıhabiboğlu, H.**, and Cvetković, Z. "Perceptual Soundfield Reconstruction in Three Dimensions via Sound Field Extrapolation", *2019 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)* (pp. 8023-8027), Brighton, UK, IEEE.
- [C37] Çöteli, M. B., and **Hacıhabiboğlu, H.**, "Multiple Sound Source Localization with Rigid Spherical Microphone Arrays via Residual Energy Test." *2019 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, Brighton, UK, IEEE, 2019.
- [C36] Çöteli, M. B., and **Hacıhabiboğlu, H.**, "Acoustic Source Separation Using Rigid Spherical Microphone Arrays Via Spatially Weighted Orthogonal Matching Pursuit." *2018 16th International Workshop on Acoustic Signal Enhancement (IWAENC)*, Tokyo, Japan. IEEE, 2018.
- [C35] Olgun, O, and **Hacıhabiboğlu, H.**, "Localization of Multiple Sources in the Spherical Harmonic Domain with Hierarchical Grid Refinement and EB-MUSIC" *2018 16th International Workshop on Acoustic Signal Enhancement (IWAENC)*, Tokyo, Japan. IEEE, 2018.
- [C34] Metan, A. C., **Hacıhabiboğlu, H.**, "Perceptual audio source culling for virtual environments", *Proc. Int. Conf. on Digital Audio Effects (DAFx-16)*, 5-9 September 2016, Brno, Czech Republic
- [C33] **Hacıhabiboğlu, H.**, "Acoustic Source Separation using the Short-time Quaternion Fourier Transforms of Particle Velocity Signals", *Proc. 41st IEEE Int. Conf. on Acoustics, Speech, and Signal Process. (ICASSP-16)*, 19-25 March 2016, Shanghai, China.
- [C32] İlhan, A. E., Sener, B., and **Hacıhabiboğlu, H.**, "Creating Awareness of Sleep-Wake Hours by Gamification", *Proc. 11th Int. Conf. Persuasive Technology*, 5-7 April, 2016, Salzburg, Austria.
- [C31] Çöteli M. B., and **Hacıhabiboglu, H.**, "On the Performance of Acoustic Intensity-based Source Localization with an Open Spherical Microphone Array", *Proc. of 139th Convention of the Audio*

Engineering Society, 29 Oct - 1 Nov 2015, New York, USA

- [C30] Demir, A. O., and **Hacıhabiboglu, H.**, "MEPHISTO: A source to source transpiler from Pure Data to FAUST", Sound and Music Computing 2015, Maynooth, Ireland, 28 July - 01 August 2015
- [C29] Yüncü, E., **Hacıhabiboglu, H.**, and Bozsahin C., "Automatic Speech Emotion Recognition using Auditory Models with Binary Decision Tree and SVM.", 22nd International Conference on Pattern Recognition (ICPR'14), Stockholm, Sweden, 24-28 August 2014
- [C28] **Hacıhabiboğlu, H.**, (2013) "On the accuracy of open spherical microphone arrays for measuring acoustic intensity", Proc. IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA'13), New Paltz, NY, USA, 18-21 October, 2013.
- [C27] Erkut, C., and **Hacıhabiboğlu, H.**, (2013) "Rhythm-action games: the sonic interaction perspective", Proc. AES 49th International Conference on Game Audio, Paper 2-4, London, UK
- [C26] **Hacıhabiboğlu, H.**, De Sena, E., and Cvetkovic, Z. (2011) "Frequency-domain scattering delay networks for simulating room acoustics in virtual reality", The 7th ACM/IEEE Int. Conf. on Signal Image Tech. and Internet-based Syst. (SITIS'11), Dijon, France
- [C25] De Sena, E., **Hacıhabiboğlu, H.**, and Cvetkovic, Z. (2011), "A generalized design method for directivity patterns of spherical microphone arrays", Proc. IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP-11), pp. 125-128, Prague, Czech Republic, 22-27 May 2011.
- [C24] De Sena, E., **Hacıhabiboğlu, H.**, and Cvetkovic, Z. (2011), "Scattering Delay Network: an interactive reverberator for computer games", Proc. AES 41st International Conference on Audio for Games, Paper #3-1, London, UK, 2-4 February 2011
- [C23] Ahmad, W., **Hacıhabiboğlu, H.**, and Kondo, A. M. (2010), "Discrete wavelet transform based shift-invariant analysis scheme for transient sound signals", Proc. 13th Int. Conf. on Digital Audio Effects (DAFx-10), Graz, Austria, September 6-10, 2010.
- [C22] Günel, B., Nikolopoulos G., **Hacıhabiboglu H.**, and Kondo, A. M. (2010) "Performance of closed-form acoustic scene decomposition for forensic analysis," Proc. AES 39th Int. Conf. on Audio Forensics., Hillerød, Denmark 17-19 June 2010.
- [C21] **Hacıhabiboğlu, H.**, de Sena, E., and Cvetkovic, Z. (2010), "Design of a circular microphone array for panoramic audio recording and reproduction: Microphone directivity", Proc. of 128th Convention of the Audio Engineering Society, Preprint #8063, 22-25 May, 2010, London, UK.
- [C20] Mate-Cid, S., **Hacıhabiboğlu, H.**, and Cvetkovic, Z. (2010), "Stereophonic rendering of source distance using DWM-FDN artificial reverberators", Proc. of 128th Convention of the Audio Engineering Society, Preprint #8030, 22-25 May, 2010, London, UK.
- [C19] De Sena, E., **Hacıhabiboğlu, H.**, and Cvetkovic, Z. (2010), "Perceptual evaluation of a circularly symmetric microphone array for panoramic recording of audio", Proc. 2nd Int. Symp. on Ambisonics, and Spherical Acoustics (CD-ROM), 6-7 May 2010, Paris, France.
- [C18] De Sena, E., **Hacıhabiboğlu, H.**, and Cvetkovic, Z. (2010), "Design of a circular microphone array for panoramic audio recording and reproduction: Array radius", Proc. of 128th Convention of the Audio Engineering Society, Preprint #8064, London, UK, 22-25 May, 2010.
- [C17] **Hacıhabiboğlu, H.**, and Cvetkovic, Z. (2009), "*Panoramic recording and reproduction of multichannel audio using a circular microphone array*", Proc. IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA'09), pp. 117-120, New Paltz, NY, USA, 18-21 October, 2009.
- [C16] Günel, B., **Hacıhabiboğlu, H.**, and Kondo, A. M. (2008), "*Intensity vector direction exploitation for exhaustive blind source separation of convolutive mixtures*", Proc. IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP-09), pp. 41-44, Taipei, Taiwan, 19-24 April 2009.
- [C15] Ahmad, W., **Hacıhabiboğlu, H.**, and Kondo, A. M. (2008), "*Morphing of transient sounds based on shift-invariant discrete wavelet transform and singular value decomposition*", Proc. IEEE International

Conference on Acoustics, Speech, and Signal Processing (ICASSP-09), pp. 297-300, Taipei, Taiwan, 19-24 April 2009.

- [C14] Günel, B., **Hacıhabiboğlu, H.**, and Kondo, A. M. (2008), "*Blind source separation and directional audio synthesis for binaural auralization of multiple sound sources using microphone array recordings*", Proc. Acoustics'08 Paris, ASA-EAA 2nd Joint Conference, (CD-ROM), Paris, France, June 29-July 4, 2008.
- [C13] Ahmad, W., **Hacıhabiboğlu, H.**, and Kondo, A. M. (2008), "*Analysis-synthesis model for transient impact sounds by stationary wavelet transform and singular value decomposition*", Proc. International Computer Music Conference (ICMC'08), Belfast, UK, 24-29 August, 2008.
- [C12] **Hacıhabiboğlu, H.**, Günel, B., and Kondo, A. M., (2007), "*Source directivity simulation in digital waveguide mesh based room acoustics models*", Proc. AES 30th International Conference on Intelligent Audio Environments, Paper #22, Saariselkä, Finland, March 15-17, 2007.
- [C11] Günel, B., **Hacıhabiboğlu, H.**, and Kondo, A. M., (2007), "*Plane wave decomposition with regularization using a single rotating microphone*", Proc. AES 30th International Conference on Intelligent Audio Environments, Paper #21, Saariselkä, Finland, March 15-17, 2007.
- [C10] **Hacıhabiboğlu, H.**, and Murtagh, F., (2006), "*Perception-based simplification for binaural room auralisation*", Proc. International Conference on Auditory Display (ICAD-06), pp. 268-271, London, UK, 20-23 June 2006.
- [C9] **Hacıhabiboğlu, H.**, Günel, B., and Kondo, A. M., (2006), "*Interpolated all-pass fractional-delay filters using root displacement*", Proc. IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP-06), vol. III, pp. 864-867, Toulouse, France, 15-19 May, 2006.
- [C8] **Hacıhabiboğlu, H.**, Günel, B., and Kondo, A. M., (2005), "*Head-related transfer function filter interpolation by root displacement*", Proc. IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA-05), pp. 134-137, New York, USA, 16-19 October 2005.
- [C7] Günel, B., **Hacıhabiboğlu, H.**, and Kondo, A. M., (2005), "*Sound field analysis using a compact pressure-gradient array*", Proc. IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA-05), pp. 154-157, New York, USA, 16-19 October 2005.
- [C6] **Hacıhabiboğlu, H.**, (2003) "*A fixed-cost variable-length auralization filter model utilizing the precedence effect*", Proc. IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA-03), pp. 1-4, New York, USA, 19-22 October, 2003.
- [C5] **Hacıhabiboğlu, H.**, (2003) "*Modelling sound source localization under precedence effect using multivariate Gaussian mixtures*", Proc. 115th Convention of the Audio Engineering Society, Preprint # 5976, New York, USA, 10-13 October 2002.
- [C4] **Hacıhabiboğlu, H.**, (2002) "*Interpolation of low-order HRTF filters using a zero displacement measure*", EAA Convention, Proc. Forum Acusticum Sevilla (CD-ROM), Sevilla, Spain, 16-20 September 2002.
- [C3] **Hacıhabiboğlu, H.**, and Canagarajah, N., (2002) "*Musical instrument recognition with wavelet envelopes*", EAA Convention, Proc. Forum Acusticum Sevilla (CD-ROM), Sevilla, Spain, 16-20 September 2002.
- [C2] **Hacıhabiboğlu, H.**, Günel, B., and Murtagh, F., (2002) "*Wavelet based spectral smoothing for head-related transfer function filter design*", in Proc. AES 22nd Conf. on Virtual, Synthetic and Entertainment Audio, pp.131-136, Espoo, Finland, 15-17 June 2002.
- [C1] **Hacıhabiboğlu, H.**, and Canagarajah, N., (2001) "*Instrument-based wavelet-packet decomposition for audio feature extraction*", Proc. of Int. Symp. on Musical Acoustics (ISMA-01) pp.465-468, Perugia, Italy, 10-14 September 2001.

NATIONAL CONFERENCES

- [K2] **Hacıhabiboğlu, H.**, (2014), “Açık küresel akustik yeğlilik sondalarının yankışımı koşullardaki ses kaynağı yön kestirimi performansı”, IEEE 22. Sinyal İşleme Uygulamaları Kurultayı, 23-25 Nisan 2014, Trabzon
- [K1] **Hacıhabiboğlu, H.**, (2013) “Birinci-dereceden açık küresel mikrofon dizileriyle akustik yeğlilik ölçümü”, 10. Ulusal Akustik Kongresi, 17-18 Aralık 2013, İstanbul

THESES

- [T2] **Hacıhabiboğlu H.**, "*Perceptual room auralization for virtual auditory displays*", Ph.D. Thesis, Queen's University Belfast, School of Computer Science, Belfast, UK, September 2004.
- [T1] **Hacıhabiboğlu H.**, "*Instrument-based Wavelet Packet Trees in Audio Analysis*", M.Sc. Thesis, University of Bristol, DMR (Digital Music Research Group), Department of Electrical and Electronic Engineering, Bristol, UK, October 2001.

OTHER

- [O2] Günel, B., **Hacıhabiboğlu, H.**, and Kondo, A. M. (2008), "*Blind source separation and directional audio synthesis for binaural auralization of multiple sound sources using microphone array recordings*", Proc. of Meetings on Acoust. (POMA), vol 4, 2008 (published online)
- [O1] **Hacıhabiboğlu H.**, (2007) "*Binaural audio processing for mobile applications*", Position Statement, EU-IST FP6 VISNET-II NoE Monthly Newsletter (*invited*), Issue #11, August 2007.

FUNDED RESEARCH PROJECTS

- TUBITAK EEEAG-119E254 “Spatial Audio Reproduction for 6DoF Immersive Environments”, 2019-present (c. \$150k)
- METU BAP University Support Grant (GAP-704-2018-2698) “Direction of arrival estimation and source separation using quaternion-based microphone array signal processing methods”, 2018-2020
- TUBITAK EEEAG-113E513, “Spatial audio reproduction using analysis-based synthesis techniques” 2014-2018 (c. \$200k)
- METU BAP-1 Startup Grant (BAP-08-11-2013-057), “Sound source localisation using open spherical acoustic intensity probes”, 2013-2014 (c. \$30k)
- Returning postdoctoral research fellowship of TUBITAK 2011- 2012, (c. \$30k), “*Design of an scalable 3D virtual acoustic simulator for computer games and interactive virtual environments*”

SKILLS AND EXPERTISE

Languages:

Turkish (native language), English (native proficiency), Italian (beginner level), German (beginner level), Swedish (beginner level)

Programming languages:

Python, C, C++, Objective-C, MATLAB

Setting up research labs:

- Specification, acquisition and management of METU-SPARG (Spatial Audio Research Group) lab.
- Specified the acoustic and audio test booth at King's College London, Division of Engineering.
- Specified the acoustics of VisLab in I-Lab, University of Surrey.
- Specified, acquired, and set up a flexible AV reproduction suite called the mini-VisLab in I-Lab/CCSR, University of Surrey, including the audio and visual equipment, sound booth, recording and reproduction setup.