Yannis Avrithis

✉ yannis@avrithis.net
⌐ avrithis.net

Summary

Dr. Yannis Avrithis is a researcher on computer vision and machine learning. Most recently, he has been a Principal Investigator at the Institute of Advanced Research on Artificial Intelligence (IARAI), Austria. Before that he was a Research Director in the Information Management Systems Institute (IMSI) of Athena Research Center, Greece. He has also worked at the LinkMedia team of Inria Rennes–Bretagne Atlantique, France, at the National and Kapodistrian University of Athens (NKUA) and at the National Technical University of Athens (NTUA), Greece, where he lead the Image and Video Analysis (IVA) team. He holds the HDR qualification from University of Rennes 1, PhD and Diploma degrees from NTUA and MSc degree from Imperial College, University of London, UK. He has been involved in 16 European, 6 French and 10 Greek research projects, he has co-supervised 17 Ph.D. theses and 23 Diploma/Masters theses, and he has published 4 theses, 3 edited volumes, 35 articles in journals, 138 in conferences and workshops, 9 book chapters and 53 technical reports in the above fields. He has contributed to the organization of 27 conferences and workshops. He has served as associate editor in 2 scientific journals and as a reviewer in 16 journals and 18 conferences. He is a senior member of IEEE and a member of ELLIS, ACM, EURASIP and the Technical Chamber of Greece. He has received an ICLR 2024 Outstanding Paper Honorable Mention.

Research interests

Computer vision, machine learning

Visual feature detection, representation of visual appearance and geometry, image matching and registration, image indexing and retrieval, clustering, nearest neighbor search, visual representation learning, unsupervised and semi-supervised learning, object detection and recognition, scene classification, image/video segmentation and tracking, and video summarization.

Education / Qualifications

2020 **Habilitation à Diriger des Recherches (HDR) in Computer Science.** University of Rennes 1, France.

1996–2001 **Ph.D. in Electrical and Computer Engineering.** National Technical University of Athens, Greece.

1993–1994 **M.Sc. in Communications and Signal Processing (with Distinction).** *Imperial College of Science, Technology and Medicine*, University of London, UK.

1988–1993 **Diploma/M.Eng. in Electrical and Computer Engineering.** National Technical University of Athens, Greece.

Professional memberships

2021– *Member.* European Lab for Learning and Intelligent Systems [ELLIS].

2019– *Senior Member.* Institute of Electrical and Electronics Engineers [IEEE].

2001– *Member.* European Signal Processing Society [EURASIP].

1998–	*Member.* Association of Computing Machinery [ACM].
1996–	*Member.* Institute of Electrical and Electronics Engineers [IEEE].
1994–	*Member.* Technical Chamber of Greece [TCG].

Employment history

2022–2023 **Principal Investigator.** Institute of Advanced Research on Artificial Intelligence (IARAI), Landstraßer Hauptstraße 5, 1030 Vienna, Austria.

2021–2022 **Research Director.** *Information Management Systems Institute*, Athena Research Center, Artemidos 6 & Epidavrou, 15125 Marousi, Greece.

2016–2021 **Research Scientist.** *LinkMedia team*, Inria Rennes–Bretagne Atlantique, Campus de Beaulieu, 35042 Rennes Cedex, France.

2015 **Research Scientist.** *Laboratory of Algebraic and Geometric Algorithms*, National and Kapodistrian University of Athens (NKUA), Panepistimioupolis, 157 84 Ilissia, Greece.

2014–2022 **Scientific Advisor.** Odd Concepts Inc., 5F Sambo BD, 5 Teheran-ro19-gil, Gangnam-gu, Seoul, Korea.

2001–2014 **Senior Researcher.** *Image, Video and Multimedia Systems Laboratory (IVML)*, National Technical University of Athens (NTUA), 9 Iroon Polytechniou Str., 157 73 Zographou, Greece.

2002–2004 **Project Manager, Research & Development.** Syntax IT, Inc., 218 Mesogion Ave., 155 61 Holargos, Athens, Greece.

1997–1999 **Software Engineer.** Infolab Multimedia Ltd, 320 Mesogion Ave., 155 62 Holargos, Athens, Greece.

1995–1997 **System Administrator.** *Image, Video and Multimedia Systems Laboratory (IVML)*, National Technical University of Athens (NTUA), 9 Iroon Polytechniou Str., 157 73 Athens, Greece.

Teaching / training activities

2024 **Program Committee member.** *Summer School: 2nd European Summer School on Artificial Intelligence [ESSAI]*, Athens, Greece, July 15-26, 2024.

2021 **Social Guest.** *Summer School: PRAIRIE/MIAI Artificial Intelligence Summer School [PAISS]*, Virtual, July 5-9, 2021.

2021 **Instructor.** *Seminar: Deep Learning and Computer Vision [DLCV]*, Doctoral School: GRAPES Doctoral school I, National and Kapodistrian University of Athens (NKUA), Virtual, February 1-8, 2021.

2019- **Visiting Professor.** *Computer Vision [CV]*, Interdisciplinary postgraduate program MSc in Data Science & Information Technologies (DSIT), National and Kapodistrian University of Athens (NKUA), Greece.

2018 **Instructor.** *Seminar: Deep Learning for Computer Vision [DLCV]*, Interdisciplinary postgraguate program: Information Technologies in Medicine and Biology (ITMB), National and Kapodistrian University of Athens (NKUA), Athens, Greece, May 10-11, 2018.

2017–2022 **Visiting Professor.** *Deep Learning for Vision [DLV]*, Interdepartmental master Research in Computer Science (SIF), University of Rennes 1 (UR1), University of Southern Brittany (UBS), ENS Rennes, National Institute of Applied Sciences (INSA), CentraleSupélec, Rennes, France.

2007–2014	**Adjunct Professor (407/80: 2007–2008, 2009–2010).** *Image and Video Analysis [IVA]*, School of Electrical and Computer Engineering, National Technical University of Athens (NTUA), Greece.
2007	**Organizing Committee member.** *Summer School: Multimedia Semantics: Analysis, Annotation, Retrieval and Applications [SSMS]*, Glasgow, UK, July 15-21, 2007.
2006	**Organizing Committee member.** *Summer School: Multimedia Semantics: Analysis, Annotation, Retrieval and Applications [SSMS]*, Chalkidiki, Greece, September 4-8, 2006.
2005–2014	**Adjunct Professor (407/80: 2005–2006).** *Signals and Systems [SS]*, School of Electrical and Computer Engineering, National Technical University of Athens (NTUA), Greece.
2003–2005	**Seminar Organizer.** *Research and Technology Training Network: Multimedia Knowledge Discovery and Management [MultiMine]*, Athens, Greece.
1996–1999	**Assistant Lecturer.** *Analog Electronic Circuits*, School of Electrical and Computer Engineering, National Technical University of Athens (NTUA), Greece.
1996–1998	**Assistant Lecturer.** *Digital Image Processing*, School of Electrical and Computer Engineering, National Technical University of Athens (NTUA), Greece.
1998–2000	**Lecturer.** *Pascal programming language*, Department of Computer Science, Hellanion University of Portsmouth, Athens, Greece.
1998–2000	**Lecturer.** *C programming language*, Department of Computer Science, Hellanion University of Portsmouth, Athens, Greece.

Awards

2024	*Outstanding Paper Honorable Mention.* ICLR 2024.
2022	*Outstanding Reviewer.* ECCV 2022.
2022	*Highlighted Reviewer.* ICLR 2022.
2021	*Outstanding Reviewer.* ICCV 2021.
2021	*Outstanding Reviewer.* CVPR 2021.
2019	*Outstanding Reviewer.* ICCV 2019.
2017	*Outstanding Reviewer.* ICCV 2017.
2017	*Outstanding Reviewer.* CVPR 2017.

Invited talks

19/10/2021	**Metric learning: knowledge transfer, data augmentation, and attention.** *In Workshop on Remote Identity Verification*, AriadNext, Rennes, France.
17/10/2021	**Metric learning: knowledge transfer, data augmentation, and attention.** *In Large-Scale Visual Localization Tutorial*, ICCV 2021, Virtual.
07/03/2019	**Unsupervised and Semi-Supervised Learning on Manifolds.** Linkmedia Team, Inria Rennes–Bretagne Atlantique, France.
22/03/2018	**Deep image retrieval and manifold learning.** Safran Tech, Paris, France.
25/09/2017	**Deep learning and image retrieval.** *In Deep Learning in Vision, Language, and Multimedia Workshop*, Inria Rennes–Bretagne Atlantique, France.
24/05/2017	**Searching over manifolds of image regions.** Facebook Research, Menlo Park, CA, US.

31/03/2016 **Large scale clustering and nearest neighbor search.** *In 38th Pattern Recognition and Computer Vision Colloquium*, Center for Machine Perception (CMP), Czech Technical University (CVUT), Prague, Czech Republic.

14/01/2016 **Geometry in shape decomposition, feature detection, matching, retrieval, clustering, and nearest neighbor search.** Institute of Computer Science (ICS), Foundation for Research and Technology–Hellas (FORTH), Heraklion, Greece.

25/11/2015 **Clustering and nearest neighbor search.** Laboratory of Algebraic and Geometric Algorithms (ΕρΓΑ), National and Kapodistrian University of Athens (NKUA), Greece.

15/06/2015 **Geometry in feature detection, matching, search, and clustering.** General Robotics, Automation, Sensing & Perception (GRASP) Laboratory, University of Pennsylvania, US.

26/03/2015 **Approximate nearest neighbor search: binary codes and vector quantization.** Laboratory of Algebraic and Geometric Algorithms (ΕρΓΑ), National and Kapodistrian University of Athens (NKUA), Greece.

02/10/2014 **Image retrieval, vector quantization and nearest neighbor search.** *In μ-Workshop on Computer Vision*, TEXMEX Research Team, Inria Rennes–Bretagne Atlantique, France.

27/04/2012 **Image matching and visual search.** Management of Data, Information and Knowledge (MADGIK) Group, National and Kapodistrian University of Athens (NKUA), Greece.

31/03/2011 **Image matching and visual search: local features and geometry.** Laboratoire Bordelais de Recherche en Informatique (LaBRI), University of Bordeaux, France.

22/11/2006 **Semantic multimedia content analysis.** *In Workshop on Knowledge in Multimedia Content*, IST Event 2006, Helsinki, Finland.

Ph.D. students / co-supervision

2020– *Konstantinos Tertikas.* Deep learning for 3D shape retrieval.

2020–2024 *Bill Psomas.* Learning Visual and Multimodal Representations.

2020–2024 *Felipe Torres Figueroa.* Learning discriminative representations to interpret image recognition models.

2020–2024 *Shashanka Venkataramanan.* Metric learning for instance- and category-level visual representations.

2020–2024 *Deniz Engin.* Video question answering with limited supervision.

2018–2021 *Yann-Raphaël Lifchitz.* Representation and adaptation for few-shot image classification.

2017–2021 *Hanwei Zhang.* Deep learning in adversarial context.

2016–2019 *Oriane Siméoni.* Robust image representation for classification, retrieval and object discovery.

2013– *Nikos Papanelopoulos.* Visual sketch retrieval.

2009–2014 *Yannis Kalantidis.* Web-scale image search, clustering and localization.

2008–2016 *Christos Varytimidis.* Local feature detection for visual information retrieval.

2008–2013 *Giorgos Tolias.* Large scale object-based image retrieval.

2005–2009 *Evaggelos Spyrou.* Semantic search of audiovisual content using knowledge.

2004–2009 *Thanos Athanasiadis*. Knowledge technologies and access to audiovisual information.

2003–2008 *Konstantinos Rapantzikos*. Visual saliency models for the analysis of static and moving images.

2003–2008 *Phivos Mylonas*. Adaptive multimedia content access based on context and user profiles.

2001–2005 *Manolis Wallace*. Intelligent knowledge-based systems in uncertain environments.

Diploma Thesis/M.Sc. students / co-supervision

2022–2023 *Thodoris Lymperopoulos*. A Study of Explainable AI: The Concept of Zero Information.

2022–2023 *Christos Morfopoulos*. Enhancing and Unifying Vision-Language Tasks with Diffusion Models.

2021–2022 *Dimitrios Reppas*. On visual explanation of supervised and self-supervised learning.

2021–2022 *Ioannis Misios*. Self-supervised Metric Learning.

2020–2021 *Phillip Bellos*. Iterative Label Cleaning for Semi-Supervised Learning.

2019–2020 *Bill Psomas*. Metric Learning: A Deep Dive.

2019–2020 *Timothée Neitthoffer*. Neural Architecture Growing, Pruning and Search.

2015–2016 *Hoel Kervadec*. Deep Hough Networks for Object Detection.

2014–2015 *Giorgos Mitsis*. Object Proposals for Rapid Object Detection.

2014–2015 *Vasileios Chatzipanos*. Compact Representations for Image Retrieval.

2013–2014 *Athanasios Papadopoulos*. Geometric Descriptor Aggregation for Image Retrieval and Classification.

2013–2014 *Georgios Perakis*. License Plate Detection and Recognition Using Local Features.

2011–2012 *Christos Arvanitis*. Computer Vision Methods for Augmented Reality.

2011–2012 *Agni Delvinioti*. Image Classification by Spatial Matching and Indexing.

2011–2012 *Spyros Leonardos*. Natural Image Segmentation by Medial Axis Decomposition.

2011–2012 *Charalampos Moustafelos*. Image Search Using Visual Synonyms.

2008–2009 *George Koumoulos*. Image Analysis and Retrieval by Local Feature Detection.

2007–2008 *Yannis Kalantidis*. Image Search Using Visual Features and Geometry.

2007–2008 *Christos Varytimidis*. Object Detection and Interactive Image Annotation.

2006–2007 *Giorgos Tolias*. Object Detection and Scene Classification Using MPEG-7 Descriptors and Visual Thesaurus.

2006–2007 *Antonis Makrimallis*. Person Detection Using Histograms of Oriented Gradients.

2005–2006 *Vicky Giannekou*. Image Matching by Shape Analysis.

2004–2005 *George Koumoulos*. Image Sequence Summarization—Shot Detection and Key Frame Selection.

Research grants [European]

2019–2024 *Advisor*. H2020-860843 / MSCA-ITN, GRAPES: learninG, pRocessing And oPtimizing shapES.

2008–2011 *Principal Investigator and Coordinator*. FP7-215453 / IP, WeKnowIt: Emerging, Collective Intelligence for Personal, Organisational and Social Use.

2008–2010 *Principal Investigator*. FP7-214306 / IP, JUMAS: Judicial Management by Digital Libraries Semantics.

2006–2009   *Principal Investigator.* FP6-034626 / STREP, Imagination: Image-Based Navigation in Multimedia Archives.

2006–2009   *Principal Investigator.* FP6-027538 / STREP, BOEMIE: Bootstrapping Ontology Evolution with Multimedia Information Extraction.

2006–2009   *Principal Investigator.* FP6-027685 / IP, MESH: Multimedia Semantic Syndication for Enhanced News Services.

2006–2010   *Principal Investigator.* FP6-26978 / IP, X-Media: Knowledge Sharing and Reuse Across Media.

2006–2008   *Principal Investigator.* FP6-027026 / NoE, K-Space: Knowledge Space of Semantic Inference for Automatic Annotation and Retrieval of Multimedia Content.

2004–2007   *Principal Investigator.* FP6-507752 / NoE, MUSCLE: Multimedia Understanding through Semantics, Computation and Learning.

2004–2007   *Principal Investigator.* FP6-001765 / IP, aceMedia: Integrating Knowledge, Semantics and Content for User-Centred Intelligent Media Services.

2002–2004   *Principal Investigator and Coordinator.* IST-2001-32504, MIRROR: World Communities of Practice for Learning and Innovation in Natural Science.

2001–2003   *Principal Investigator and Technical Leader.* IST-1999–20502, FAETHON: Unified Intelligent Access to Heterogeneous Audiovisual Content.

1997–2001   *Researcher.* Training and Mobility of Research, PHYSTA: Principled Hybrid Systems Theory and Applications.

1998–1999   *Researcher.* Educational Multimedia Task Force, MODULATES: Multimedia Organization for Developing the Understanding and Learning of Advanced Technology in European Schools.

1996–1999   *Researcher.* ESPRIT 22266 Multimedia Support Centers, MCUBE: Mediterranean Multimedia - Multimedia Support Center for Culture and Arts.

1993–1996   *Researcher.* Human Capital and Mobility, MANADIX: Motion Analysis in Advanced Image Communication Systems.

Research grants [French]

2020–2023   *Researcher.* CIFRE-2020, MQA: Semantic Multimodal Question Answering in Domestic Environments.

2020–2023   *Researcher.* ANR-19-CE23-0028, MEERQAT: MultimEdia Entity Representation and Question Answering Tasks.

2020–2024   *Scientific Partner.* ANR-2019-103385 / JCJC, UNLIR: Unsupervised Representation Learning for Image Recognition.

2018–2019   *Researcher.* MIC/BnF, BnF: Classification of cultural heritage images.

2018–2021   *Principal Investigator.* CIFRE-2017-1744, Few-shot learning for object recognition in aerial images.

2018–2020   *Principal Investigator.* Images & Réseaux AAP-PME-2017, MobilAI: Computer vision for smart phones.

Research grants [Greek]

2011–2014   *Researcher.* EPAN II 09SYN-72-922, IS-Helleana: Intelligent System for HELLEnic Audiovisual National Aggregator.

2006–2008   *Researcher.* Image, Sound and Language Processing, Eikonognosia: Management and Advanced Access to Scientific Data and Documentation of Byzantine Works of Art.

2006–2008 *Principal Investigator.* PENED, OntoMedia: Semantic Multimedia Content Analysis Using Knowledge Technologies.

2006–2007 *Principal Investigator.* Image, Sound and Language Processing, DELTIO: Multimedia Content Analysis using Ontology Evolution with Application to TV News Programs.

2004–2007 *Principal Investigator.* EPAN-03DSBEPRO-44, VisualAsset: Multimedia Document Analysis, Information Extraction and Management.

2003–2005 *Principal Investigator.* EPAN, MultiMine: Research and Technology Training Network in Multimedia Knowledge Discovery and Management.

1999–2001 *Researcher.* EPET II - EKBAN, PANORAMA: An Intelligent System for Retrieval and Mining of Audiovisual Material.

1997–2000 *Researcher.* SYN-96, VoD: Video-on-Demand System Using the MPEG-2 Standard.

1997–1999 *Researcher.* EPET II Service Providing Laboratories, IVML: Image, Video and Multimedia Systems Laboratory.

1995–1997 *Researcher.* EKBAN-504, NIKA: Generalized Medical Image Processing and Management System.

Conference organization

2025 *Area Chair.* 39th Annual Conference on Neural Information Processing Systems [NeurIPS], San Diego, US, December 9-15, 2025.

2024 *Area Chair.* 35th British Machine Vision Conference [BMVC], Glasgow, UK, November 25-28, 2024.

2024 *Area Chair.* 38th Annual Conference on Neural Information Processing Systems [NeurIPS], Vancouver, Canada, December 9-15, 2024.

2024 *Area Chair.* IEEE/CVF Winter Conference on Applications of Computer Vision [WACV], Waikoloa, Hawaii, US, January 4-8, 2024.

2023 *Area Chair.* 34th British Machine Vision Conference [BMVC], Aberdeen, UK, November 20-24, 2023.

2022 *Area Chair.* IEEE/CVF Conference on Computer Vision and Pattern Recognition [CVPR], New Orleans, Louisiana, June 21-24, 2022.

2019 *Workshops Chair.* 27th ACM Multimedia Conference [ACM-MM], Nice, France, Oct 21-25, 2019.

2017 *Area Chair.* Multimedia Search and Recommendation, 25th ACM Multimedia Conference [ACM-MM], Mountain View, CA, USA, Oct 23-27, 2017.

2017 *Area Chair.* Image, Video, and Multimedia Processing, 25th European Signal Processing Conference [EUSIPCO], Kos, Greece, Aug 28–Sep 2, 2017.

2009 *Program Chair.* ACM International Conference on Image and Video Retrieval [CIVR], Santorini, Greece, Jul 8-10, 2009.

2009 *General Chair.* 7th International Workshop on Content-Based Multimedia Indexing [CBMI], Chania, Greece, Jun 3-5, 2009.

2009 *Program Chair.* 15th International Multimedia Modeling Conference [MMM], Sophia-Antipolis, France, Jan 7-9, 2009.

2007 *General Chair.* Second International Conference on Semantic and Digital Media Technologies [SAMT], Genova, Italy, Dec 5-7, 2007.

2007 *General Chair.* 8th International Workshop on Image Analysis for Multimedia Interactive Services [WIAMIS], Santorini, Greece, Jun 6-8, 2007.

2006	*General Chair.* 1st International Conference on Semantic and Digital Media Technologies [SAMT], Athens, Greece, Dec 6-8, 2006.
2006	*Organizer.* Workshop on Knowledge in Multimedia Content [KMC], Information Society Technologies Event 2006 [IST], Helsinki, Finland, Nov 22, 2006.
2006	*Organizer.* Workshop on Ontology Evolution and Multimedia Information Extraction [BOEMIE], 15th International Conference on Knowledge Engineering and Knowledge Management [EKAW], Podebrady, Czech Republic, Oct 2-6, 2006.
2006	*Organizer.* Special Session on Semantic Multimedia Analysis for Annotation and Retrieval [SMAR], International Conference on Visual Information Engineering [VIE], Bangalore, India, Sep 26-28, 2006.
2006	*Organizer.* Special Session on Neural Networks for Semantic Image and Video Analysis [SIVA], International Conference on Artificial Neural Networks [ICANN], Athens, Greece, Sep 10-14, 2006.
2006	*Local Organizing Committee member.* International Conference on Artificial Neural Networks [ICANN], Athens, Greece, Sep 10-14, 2006.
2005	*Special Sessions Organizer.* 2nd European Workshop on the Integration of Knowledge, Semantic and Digital Media Technologies [EWIMT], London, UK, Nov 30–Dec 1, 2005.
2005	*Co-Organizer.* Special Session on Intelligent Multimedia and Semantics [IMS], International Conference on Artificial Neural Networks [ICANN], Warsaw, Poland, Sep 11-15, 2005.
2005	*Program Chair.* Workshop on Multimedia Knowledge Discovery and Management [MultiMine], Athens, Greece, Jun 28, 2005.
2005	*Local Arrangements.* Workshop on Multimedia and the Semantic Web [MMSW], 2nd European Semantic Web Conference [ESWC], Heraklion, Greece, May 29–Jun 1, 2005.
2004	*Session Chair.* EU Project Session, ACM International Conference on Image and Video Retrieval [CIVR], Dublin, Ireland, Jul 21-23, 2004.
2003	*Program Co-Chair.* Workshop on Intelligent Access to Audiovisual Content [WIAAC], Athens, Greece, Apr 3, 2003.
2001	*Liaison with Industry, Local Organization Committee.* International Workshop on Very Low Bitrate Video Coding [VLBV], Athens, Greece, Oct 11-12, 2001.
1997	*Local Arrangements.* International Workshop on Applications and Perspectives of Neural Network Technology in Greece and the Broader Balkan Area [WANN], Athens, Greece, Feb 21, 1997.

Academic Juries

03/2024	*PhD Reviewer and Jury member.* Elias Ramzi (advised by Nicolas Thome, Nicolas Audebert, Clément Rambour), Conservatoire National des arts et Métiers (Cnam), Paris, France, March 2024.
06/2023	*PhD Reviewer and Jury member.* Bulent Sariyildiz (advised by Yannis Kalantidis, Diane Larlus, Karteek Alahari), Inria Grenoble, Naver Labs Europe, Grenoble, France, June 2023.
12/2022	*PhD Jury member.* Yuqing Hu (advised by Vincent Gripon, Stephane Pateux), IMT Atlantique Bretagne-Pays de la Loire, Brest, France, Dec 6, 2022.
11/2022	*PhD Jury member.* Huy V. Vo (advised by Patrick Pérez, Jean Ponce), Ecole Normale Superieure, Inria, Valeo.ai, Paris, France, Nov 28, 2022.

10/2021	*MSc Jury member.* Andreas Zamanos (advised by Ioannis Emiris, Evangelia D. Chrysina), National and Kapodistrian University of Athens (NKUA), Athens, Greece, Oct 8, 2021.
11/2020	*PhD Reviewer and Jury member.* Patrick Bordes (advised by Benjamin Piwowarski, Patrick Gallinari), Paris-Sorbonne Université, Paris, France, Nov 26, 2020.
07/2020	*MSc Jury member.* Nikos Efthymiadis (advised by Giorgos Tolias, Ioannis Emiris), National and Kapodistrian University of Athens (NKUA), Athens, Greece, Jul 16, 2020.
06/2020	*PhD Reviewer and Jury member.* Martin Engilberge (advised by Matthieu Cord, Patrick Pérez, Louis Chevallier), Paris-Sorbonne Université, Paris, France, Jun 12, 2020.
03/2011	*PhD Reviewer and Jury member.* Rémi Vieux (advised by Achille Braquelaire, Jenny Benois-Pineau), Université de Bordeaux, Bordeaux, France, Mar 30, 2011.
09/2008	*PhD Reviewer.* David Vallet (advised by Pablo Castells), Universidad Autonoma de Madrid, Madrid, Spain, Sep 8, 2008.

Advising activities

2021–2023	*Member of Advisory Board.* H2020 project DeepCube [DeepCube], European Commission.
2021–	*Member of Advisory Board.* CrossOver Technology Limited [CrossOver], UK.

Evaluator activities

2021	*Proposal Reviewer.* Israel Science Foundation [ISF].
2020	*Project Reviewer and Rapporteur.* Post-Doctoral Research project, State Education Development Agency [SEDA], Latvia.
2017–2018	*Proposal Reviewer and Rapporteur.* State Education Development Agency [SEDA], Latvia.
2017–2021	*Proposal Reviewer.* Agence Nationale de la Recherche [ANR], France.
2010–2012	*Reviewer and Rapporteur.* FP7-231761 Integrated Project NoTube [NoTube], European Commission, DG Information Society and Media, Unit E2.

Editorial activities

2021–	*Associate Editor.* Computer Vision and Image Understanding [CVIU].
2009–2014	*Associate Editor.* EURASIP Journal on Image and Video Processing [JIVP].

Reviewer in journals

2021–	International Journal of Computer Vision [IJCV]
2014	ACM Computing Surveys [CSUR]
2012	Elsevier: Image and Vision Computing [IVC]
2008–2021	Elsevier: Computer Vision and Image Understanding [CVIU]
2007–2016	Elsevier: Neurocomputing [NEUCOM]
2006–2010	Elsevier: Signal Processing: Image Communication [SP:IC]
2006	IEEE Transactions on Evolutionary Computation [TEVC]
2005–2009	IEEE Transactions on Multimedia [TMM]
2004–2005	IEE Proceedings on Vision, Image and Signal Processing [IEE-VIS]
2004–2008	IEEE Transactions on Circuits and Systems for Video Technology [TCSVT]
2004–	IEEE Transactions on Pattern Analysis and Machine Intelligence [TPAMI]
2004–2016	Springer: Multimedia Tools and Applications [MTAP]
2004	Springer: Pattern Analysis and Applications [PAA]

2003	EURASIP Journal of Applied Signal Processing [JASP]
2002	IEEE Transactions on Image Processing [TIP]
2002	Springer: Machine Vision and Applications [MVA]

Program Committee member in conferences

2024–	International Conference on Machine Learning [ICML]
2022–	Conference on Neural Information Processing Systems [NeurIPS]
2022–	International Conference on Learning Representations [ICLR]
2013–	International Conference on Computer Vision [ICCV]
2013–	IEEE Conference on Computer Vision and Pattern Recognition [CVPR]
2012–	European Conference on Computer Vision [ECCV]
2012–2016	British Machine Vision Conference [BMVC]
2012	ACM International Conference on Multimedia Retrieval [ICMR]
2009–2013	International Multimedia Modeling Conference [MMM]
2009	International Conference on Digital Signal Processing [DSP]
2007–2016	ACM Multimedia Conference [ACM-MM]
2007–2008	ACM International Conference on Image and Video Retrieval [CIVR]
2007	European Signal Processing Conference [EUSIPCO]
2007–2017	International Conference on Multimedia and Expo [ICME]
2006–2007	International Conference on Visual Information Engineering [VIE]
2005–2017	IEEE International Conference on Acoustics, Speech, and Signal Processing [ICASSP]
2004–2016	IEEE International Conference on Image Processing [ICIP]
2002–2009	International Conference on Artificial Neural Networks [ICANN]

Program Committee member in workshops

2006	ESWC Workshop on Mastering the Gap: From Information Extraction to Semantic Representation [MTG]
2006	International Workshop on Semantic Web Annotations for Multimedia [SWAMM]
2005	European Workshop on the Integration of Knowledge, Semantic and Digital Media Technologies [EWIMT]
2005–2013	Workshop on Image Analysis for Multimedia Interactive Services [WIAMIS]
2003–2016	International Workshop on Content-Based Multimedia Indexing [CBMI]

Publications

Theses

[T4] Yannis Avrithis. "Exploring and Learning from Visual Data". HDR Thesis. Rennes, France: University of Rennes 1 (UR1), July 2020.

[T3] Yannis Avrithis. "Video Sequence Analysis for Content Description, Summarization and Content-Based Retrieval". PhD thesis. Athens, Greece: School of Electrical and Computer Engineering; National Technical University of Athens (NTUA), Feb. 2001.

[T2] Yannis Avrithis. "Investigating the Capacity of a Cellular CDMA System". MA thesis. London, UK: Department of Electrical, Electronic Engineering; Imperial College of Science, Technology, and Medicine, University of London (IC), Oct. 1994.

[T1] Yannis Avrithis. "Fuzzy Logic Processor for Control Systems". MA thesis. Athens, Greece: School of Electrical and Computer Engineering; National Technical University of Athens (NTUA), Sept. 1993.

Edited volumes

[V3] Benoit Huet, Alan Smeaton, Ketan Mayer-Patel, and Yannis Avrithis, eds. *Advances in Multimedia Modeling*. Vol. 5371. Lecture Notes in Computer Science (LNCS). Springer, Jan. 2009. ISBN: 978-3-540-92891-1.

[V2]   Bianca Falcidieno, Michela Spagnuolo, Yannis Avrithis, Ioannis Kompatsiaris, and Paul Buitelaar, eds. *Semantic Multimedia*. Vol. 4816. Lecture Notes in Computer Science (LNCS). Springer, Dec. 2007. ISBN: 978-3-540-77033-6.

[V1]   Yannis Avrithis, Yiannis Kompatsiaris, Steffen Staab, and Noel O'Connor, eds. *Semantic Multimedia*. 1st. Vol. 4306. Lecture Notes in Computer Science (LNCS). Springer, Dec. 2006. ISBN: 978-3-540-49335-8.

Journal articles

[J34]   Michalis Lazarou, Tania Stathaki, and Yannis Avrithis. "Exploiting unlabeled data in few-shot learning". In: *Pattern Recognition (PR)* 161 (May 2025), p. 111304.

[J33]   Efthymios Georgiou, Yannis Avrithis, and Alexandros Potamianos. "PowMix: A Versatile Regularizer for Multimodal Sentiment Analysis". In: *IEEE Transactions on Audio, Speech and Language Processing (TASL)* 32 (Nov. 2024), pp. 5010–5023.

[J32]   Hanwei Zhang, Felipe Torres, Ronan Sicre, Yannis Avrithis, and Stephane Ayache. "Opti-CAM: Optimizing saliency maps for interpretability". In: *Computer Vision and Image Understanding (CVIU)* 248 (Nov. 2024), p. 104101.

[J31]   Zhaohui Yang, Miaojing Shi, Chao Xu, Vittorio Ferrari, and Yannis Avrithis. "Training Object Detectors from Few Weakly-Labeled and Many Unlabeled Images". In: *Pattern Recognition (PR)* 120 (Dec. 2021), pp. 108–164.

[J30]   * Hanwei Zhang, Yannis Avrithis, Teddy Furon, and Laurent Amsaleg. "Walking on the Edge: Fast, Low-Distortion Adversarial Examples". In: *IEEE Transactions on Information Forensics and Security (TIFS)* 16 (Sept. 2021), pp. 701–713.

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