Curriculum Vitae of Anastasios Roussos (December 2023)
Human-Centered Computer Vision Group (HCCV), Computational Vision & Robotics Laboratory (CVRL), Institute of Computer Science, Foundation for Research and Technology - Hellas (FORTH) N. Plastira 100, Vassilika Vouton, GR70013 Heraklion, Crete, Greece

PERSONAL INFORMATION

Name: Anastasios (Tassos) Roussos. **Name in Greek**: Αναστάσιος (Τάσος) Ρούσσος
Website: http://users.ics.forth.gr/~troussos/
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Researcher ORCID No: 0000-0001-6015-3357

EDUCATION

2005 – 2010	**PhD in Electrical & Computer Engineering** National Technical University of Athens (NTUA), Greece. Research field: Image Analysis and Computer Vision. Supervisor: Prof Petros Maragos PhD Thesis: "*Nonlinear Diffusion in Computer Vision and Statistical Shape Models, with Applications in Image Analysis of Articulators of Voiced and Signed Speech*"
2000 – 2005	**Diploma/MEng in Electrical & Computer Engineering** National Technical University of Athens (NTUA), Greece Direction of specialization: Communications engineer. Diploma Thesis: "*Theory and Applications of Partial Differential Equations in Computer Vision*"

CURRENT POSITION

2019 –	**Principal Researcher (Associate Professor level)** Institute of Computer Science, Foundation for Research and Technology - Hellas, Greece

PREVIOUS POSITIONS

2020 – 2023	**Honorary Senior Lecturer** College of Engineering, Maths and Physical Sciences, University of Exeter, UK
2017 – 2019	**Lecturer (equiv. to Assistant Professor) in Computer Science** College of Engineering, Maths and Physical Sciences, University of Exeter, UK
2014 – 2017	**Research Associate** Department of Computing, Imperial College London, UK
2013 – 2014	**Research Associate** Department of Computer Science, University College London, UK
2010 – 2013	**Research Associate** School of Electronic Engineering & Computer Science, Queen Mary, University of London, UK
2005 – 2010	**Research Assistant** School of Electrical & Computer Engineering, National Technical University of Athens, Greece

FELLOWSHIPS AND AWARDS

2022	**Best Paper Finalist** (top 33 out of 8,161 submissions) at the 2022 IEEE Computer Vision and Pattern Recognition (CVPR) Conference for the oral paper: F. Paraperas-Papantoniou, P. Filntsis, P. Maragos and A. Roussos, "*Neural Emotion Director*", CVPR'22
2020	**Outstanding Reviewer Award** of the European Conference on Computer Vision
2018 – 2019	**Fellow of the Alan Turing Institute**, UK
2014 – 2015	**Non-medical honorary contract** with Great Ormond Street Hospital (GOSH), UK
2009	**Thomaidis Foundation Award for the Progress of Arts and Sciences** (NTUA, Greece) for the article: A. Roussos & P. Maragos, "*Reversible interpolation of vectorial images by an anisotropic diffusion-projection PDE*", IJCV 2009
2007	**Best Student Paper Award** of the 1st International Conference on Scale Space and Variational Methods in Computer Vision, Ischia, Italy, for the paper: A. Roussos & P. Maragos, "*Vector-Valued Image Interpolation by an Anisotropic Diffusion-Projection PDE*"
2007	**Best Poster Award** of the 1st Panhellenic Conference of Electrical and Computer Engineering Students (SFHMMY-2007), for the paper: A. Roussos and P. Maragos, "*Vector-Valued Image Interpolation by an Anisotropic Diffusion-Projection PDE*"

2007 - 2008	**Research scholarship** for PhD studies, National Technical University of Athens.
2000	**Award** in the **Panhellenic Competition in Physics** among High School Students, Hellenic Physical Society.
1997	**3rd Award** in the 57th **Panhellenic Competition in Mathematics** among High School Students, Hellenic Mathematical Society.

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2020 –	**Supervisor of 2 Postdoctoral Fellows**
	Institute of Computer Science, Foundation for Research & Technology - Hellas, Greece
2019 –	**Supervisor of 5 Master Students**
	University of Crete (UOC), Greece
2020 –	**Co-Supervisor of 6 Diploma (MEng) Students**
	Sch. of Electrical & Computer Engineering, National Technical University of Athens, Greece
2017 – 2022	**Supervisor of 1 PhD student and 12 Master Students**
	Department of Computer Science, University of Exeter, UK
2014 – 2017	**Co-Supervisor of 3 PhD students**
	Department of Computing, Imperial College London, UK
2010 – 2013	**Co-Supervisor of 1 PhD student**
	Sch. of Electronic Engineering & Comp. Science, Queen Mary, University of London, UK

TEACHING ACTIVITIES

2020 –	**Full Faculty Member**, Interdisciplinary Graduate Programme in the BRAIN and MIND sciences, University of Crete, Greece
	Teaching of the course "Introduction to Computational Neurosciences"
2017 – 2019	**Lecturer,** Department of Computer Science, University of Exeter, UK
	"Computer Vision" (MSc course), "Machine Vision" (MSc Data Science course), "Computer Graphics" (3rd year course)
2016	**Postdoctoral Teaching Assistant,** Department of Computing, Imperial College London, UK
	"Advanced Statistical Machine learning and Pattern Recognition" (postgraduate and undergraduate course)
2013 – 2014	**Postdoctoral Teaching Assistant,** Department of Computer Science, University College London, UK
	"Artificial Intelligence & Neural Computing" and "Computational Photography and Capture" (postgraduate and undergraduate courses), "Mathematical Methods Algorithms and Implementations" (postgraduate course)
2005 – 2010	**Graduate Teaching Assistant,** School of Electrical & Computer Engineering, NTUA, Greece
	"Computer Vision" (postgraduate and undergraduate course)

INVITED TALKS AND ORAL PRESENTATIONS (SELECTED)

2023	**"Limitations of Generative AI Models for Image Synthesis"** (oral presentation), Interdisciplinary-Artistic Symposium "Creating Polyphone Places of Meaning, Learning and Development", Rethymnon, Greece
2023	**"Human-Centered 3D Computer Vision"** (invited talk), Multimedia Laboratory, Athens School of Fine Arts, Greece
2021	**"Deep Learning and Artificial Intelligence"** (seminar), Interdisciplinary Seminar Series, School of Social Sciences, University of Crete, Greece
2020	**"3D Computer Vision for Faces and Other Deformable Objects"** (seminar), Computer Vision, Speech Communication and Signal Processing Group & Intelligent Robotics and Automation Laboratory, School of Electrical & Computer Engineering, NTUA, Greece
2017	**"Dense 3D Modelling and Monocular Reconstruction of Deformable Objects"** (seminar), Department of Computer Science Research Seminars, College of Engineering, Mathematics and Physical Sciences, University of Exeter, UK.
2016	**"Dense 3D Reconstruction and Modelling of Faces: Addressing the Real-World Challenges"**, Department of Computing Research Associate Symposium, Imperial College London, UK.
2016	**"Dense 2D Tracking, 3D Reconstruction and Modelling of Non-rigid Objects with**

Variational Methods" (invited talk),
Seminars of Centre for Vision, Speech & Signal Processing (CVSSP), University of Surrey, UK.

2015 **"Dense Variational 3D Modelling and Reconstruction of Faces"** (invited talk),
Symposium on "The Computational Face - Automatic Face Analysis and Synthesis",
British Machine Vision Association and Society for Pattern Recognition (BMVA), London, UK

2014 **"Dense Multi-Frame Optic Flow Using Subspace Constraints: Algorithms and Applications"** (invited talk),
Minisymposium on Multi-Frame Motion Estimation and Optical Flow Algorithms,
SIAM Conference on Imaging Science, Hong Kong

2014 **"3D Reconstruction of Deformable Surfaces from Monocular Sequences"** (invited lecture),
Hamlyn Winter School on Surgical Imaging and Vision, Imperial College London, UK

2013 **"Variational Methods for Video Registration and 3D Reconstruction from Medical Images"** (invited talk),
Symposium on Medical Imaging Meets Computer Vision,
The Rank Prize Funds, Grasmere, Cumbria, UK

2009 **"Diffusion Partial Differential Equations for Image Enhancement"** (invited talk),
Workshop on Novel Methods for Transmission, Reception and Analysis of Space-Satellite Signals and Images, National Technical University of Athens, Greece.

EXHIBITIONS & PUBLIC OUTREACH

2023 **"[AI and Art]"**,
Interview, RealFM podcasts, part of the series "Artificial Intelligence, staring at the future"

2023 **"Random Walk"**,
Digital Art Exhibition, Festival "Inside the Image, Reenacting Cinema through Extended Media" co-organized by Fournos art center (Athens, Greece) and École Nationale Supérieure des Arts Décoratifs (Paris, France). Location: Alphaville cinema, Athens, Greece
In collaboration with Eleftherios Kontopodis and Stavroula Zoi.

2023 **"Random Walk",**
Digital Art Exhibition, 7th Chaniartoon, International Comic & Animation Festival, Chania, Greece
In collaboration with Eleftherios Kontopodis and Stavroula Zoi.

2022 **"Advanced Spectro-Bathymetric Mapping of Shallow Seafloor using UAV Imagery and Deep Learning Techniques",**
Researcher's Night, Heraklion, Greece

2020 **"Mapping the seafloor of coastal areas of Crete using drones",**
Researcher's Night, online

2019 **"4D Face Reconstruction Demo",**
Researcher's Night, Heraklion, Greece

CONFERENCE ORGANISATION

2023 **Co-organizer,** Signal processing and machine learning to foster accessibility in cultural environments (SPACE), Workshop of IEEE ICASSP 2023, Rhodes Island, Greece Conference (EUSIPCO'17), Island of Kos, Greece

2017 **General Chair**, Multilearn 2017: Multimodal processing, modeling and learning approaches for human-computer/robot interaction, Workshop of the 25th European Signal Processing Conference (EUSIPCO'17), Island of Kos, Greece

2017 **General Chair**, 300 3D Facial-Videos in-the-Wild Challenge (300-3DVW), Workshop of the International Conference on Computer Vision (ICCV'17), Venice, Italy

2017 **Local Chair,** British Machine Vision Conference (BMVC'17), Imperial College London, UK

REVIEWING ACTIVITIES

Reviewer for International Journals:

2023 –   IEEE Transactions on Affective Computing
2023 –   Scientific Reports, Springer Nature
2021 –   IEEE Transactions on Visualization and Computer Graphics
2016 –   IEEE Transactions on Pattern Analysis and Machine Intelligence

2016 –	IEEE Transactions on Cybernetics
2015 –	Journal of Mathematical Imaging and Vision
2013 –	Computer Vision and Image Understanding
2012 –	EURASIP Journal on Image and Video Processing
2012 –	Image and Vision Computing
2011 –	Journal of Machine Learning Research
2009 –	IEEE Transactions on Image Processing
2008 –	International Journal of Computer Vision
2007 –	IEEE Signal Processing Letters

Reviewer for International Conferences:

2007–   Reviewer for **13 international conferences** including the top-tier ones in the field of Computer Vision (IEEE CVPR, IEEE ICCV, ECCV, etc.)

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2012 –	**Member**, The British Machine Vision Association (BMVA)
2007 –	**Member**, Institute of Electrical and Electronics Engineers (IEEE)
2006 –	**Member**, Technical Chamber of Greece (TEE)

PUBLICATIONS IN PEER-REVIEWED JOURNALS & CONFERENCES

As of December 2023, Dr Roussos has published **11 articles** in top-tier international journals of Computer Vision, Biometrics, Machine Learning and Imaging Sciences (IEEE TPAMI, IEEE TBIOM, Springer IJCV, JMLR, SIAM SIIMS) and **29 papers** in peer-reviewed international conferences, including the top conferences of Computer Vision, Pattern Recognition and Augmented Reality (IEEE/CVF CVPR, IEEE ICCV, ACM ISMAR). He has more than **2150 citations** to his articles with an **h-index of 21** and an **i10-index of 28** (Source: Google Scholar, Dec. 2023)**.**

Google Scholar Profile: https://scholar.google.co.uk/citations?user=Baj1CKYAAAAJ
List with Publications at Personal Website: https://users.ics.forth.gr/~troussos/publications.html

RESEARCH GRANTS

Project Title	Funding source	Period	Role in the project
Large-scale, Diverse 3D Modeling of Human Hands (DiveHands) *Note: DiveHands ranked 2nd among 14 competitive proposals from all ICS-FORTH's laboratories (top 14%)*	Internal Seed Funding Grants, ICS-FORTH	2024-2025	Co-PI of the project (PI: I. Oikonomidis)
Craft Understanding, Education, Training, and Preservation for Posterity and Prosperity (CRAEFT)	Horizon Europe	2023-2026	Member of FORTH's research team, contributing in the research on editable neural representations of 3D geometry (PI: X. Zabulis)
The Forth Skull Model project (FSM) *Note: FSM ranked 3rd among 24 competitive proposals from all ICS-FORTH's laboratories (top 12%)*	Internal Seed Funding Grants, ICS-FORTH	2022-2024	PI of the project
Diversity in STEAM (STEAMDIVE)	Erasmus+, European Union	2022-2025	Member of FORTH's research team, leading the research on interactive installations for real-time 3D face reenactment
3D-aware Neural Rendering for Photo-realistic Synthesis of Sign Language Videos	NVIDIA Academic Hardware Grant	2022-	PI of the project
Advanced spectro-bathymetric mapping of shallow seafloor using UAV imagery & deep learning (ACTYS) *Note: ACTYS ranked 1st among 20 competitive proposals from all FORTH's institutes (top 5%)*	Synergy Grants, FORTH	2020-2022	PI for ICS-FORTH. Leading the research on estimation of accurate 3D models of the shallow seafloor from drone images

Automatic guidance in museums by using sign language (SignGuide)	Hellenic Foundation for Research & Innovation (HFRI)	2020-2023	Member of FORTH's research team, leading the research on modelling and recognition of non-manual signals
Knowledge Transfer Partnership between the University of Exeter and RCR Industrial Flooring Ltd	Innovate UK	2019-2021	Co-PI & Academic supervisor. Vision-based mapping of the 3D surface of industrial floors and their defects
Face Matching for Automatic Identity Retrieval, Recognition, Verification & Management (FACER2VM)	Engineering & Physical Sciences Research Council (EPSRC), UK	2016-2019	Leading the research on dense 3D modelling and reconstruction of facial shape from monocular input
GOSH 3D Morphable Models	Great Ormond Street Hospital (GOSH), UK	2014-2016	Leading the research on applying large-scale 3D face modelling to corrective craniofacial surgery