

Panagiotis P. Filntisis

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EDUCATION

National Technical University of Athens

Ph.D. in Electrical and Computer Engineering

Athens, Greece

Nov. 2015 – Dec. 2022

- Advised by Prof. Petros Maragos
- **Areas:** Computer Vision, 3D Human Modeling, Affective Computing, Emotion Recognition
- **Thesis:** Multimodal Deep Learning for Emotion Recognition and Expression Synthesis with Applications in Human-Robot Interaction

National Technical University of Athens

MEng in Electrical and Computer Engineering (5-year integrated)

Athens, Greece

Oct. 2007 – Oct. 2015

- Advised by Prof. Petros Maragos
- **Thesis:** AudioVisual Speech Synthesis with Hidden Markov Models

RESEARCH EXPERIENCE

Max Planck Institute for Intelligent Systems – Perceiving Systems

Guest Researcher

Tübingen, Germany

Jan. 2025 – Present

- Research on learning-based 3D human modeling and facial expression reconstruction.

Athena Research and Innovation Center – Institute of Robotics

PostDoctoral Researcher

Maroussi, Greece

Jan. 2023 – Present

Research Assistant

Jan. 2016 – Dec. 2022

- **Work Package Leader** in [PILLAR-Robots](#) EU Horizon Europe project (Jun. 2025 – Present).
- Conducted research on machine learning methods for robotic perception, multimodal emotion recognition, expressive 3D avatars, sign language processing, and human-robot interaction.
- Contributed to 5 EU-funded projects ([BabyRobot](#), [iMuSciCA](#), [EASIER](#), [PILLAR-Robots](#), [HERON](#)), 1 national project (Autonomous Robotic Systems), and 1 industry project (Cosmote VA).

National Technical University of Athens – IRAL/CVSP Lab

PostDoctoral Researcher

Athens, Greece

Jan. 2023 – Present

Research Assistant

Feb. 2019 – Dec. 2022

- Research on machine learning for perception in robotic and embedded settings: gesture and action recognition, anomaly detection in wearable biosignals, and emotion recognition ([ePrevention](#), [TeachBot](#), [BonsAPPs 1st OC](#)).

TEACHING EXPERIENCE AND SUPERVISION

Guest Lecturer: Data Analysis & Machine Learning MSc, *University of Crete*

Oct. 2024

Lecture: “Human Face, Expression, and Emotion 3D Modeling using Deep Learning.”

Senior TA: Machine Learning, *ECE School, NTUA*

Fall 2022 – Fall 2025

Lab design and execution.

Senior TA: Pattern Recognition and Machine Learning, *ECE School, NTUA*

Fall 2017–2019, 2022

Lab sessions, tutorials, lab design and execution, student evaluation.

Senior TA: Digital Signal Processing, *ECE School, NTUA*

Spring 2019–2021

Lab sessions, tutorials, lab design and execution, student evaluation.

MEng Thesis Co-supervision, *ECE School, NTUA*

2019–

Co-supervised 11 MEng theses in computer vision, machine learning, robotic perception, sign language processing, and generative AI. Several resulted in publications at CVPR, ICCV-W, FG, PETRA, and CVPR Workshops, including papers receiving Best Paper distinctions.

GRANTS AND FUNDING

3× **EuroHPC Development Access Grants** (as PI) – 5,500 GPU compute hours each

2026 –

AWS Cloud Grant via GRNET/EDYTE – \$95,000 in GPU cloud credits

2025 – 2026

Research Scholarship for the TeachBot project – National Funded

2020 – 2021

AWARDS AND DISTINCTIONS

CVPR-W NTIRE Workshop Challenge 2nd Place	Jun. 2026
PETRA 2025 Best Student Paper Award	Jun. 2025
ICCV 2025 P13N Workshop Best Paper Award	Oct. 2025
ICASSP 2025 Signal Processing EEG-Music Emotion Recognition GC 3rd Place	Apr. 2025
“Iakovos Giourounlian” Award for best Ph.D. thesis with Industrial Interest	Jun. 2023
CVPR 2022 Best Paper Finalist with Neural Emotion Director	Jun. 2022
ECCV 2020 BEEU Workshop Challenge Winners	Aug. 2020
IROS 2019 Travel Grant Awardee	Oct. 2019
ICVSS 2018 Selected for participation & Reading Group Prize	Jul. 2018
IEEE SPS Travel Grant Awardee	Jun. 2017
10 Best StartUps in “Reditup” contest by “Papastratos” with Miyagi skill-trading platform	Jun. 2015
IEEE NTUA EMB Chapter Apps4meds’s Hackathon 1st Place	Nov. 2014

INVITED TALKS

“Advancements in 3D Facial Expression Reconstruction” <i>Max Planck Institute for Intelligent Systems, Tübingen, Germany</i>	Sep. 2024
“Geometry of Facial Shapes and ML Methods for Synthesis of Expressive Multimodal Avatars” <i>Dagstuhl Seminar 18422: Shape Analysis, Schloss Dagstuhl, Wadern, Germany</i>	Oct. 2018

ACADEMIC SERVICE

Member of the Exhibition & Local Arrangements Committee for Hellenic Robotics Forum	July 2026
Co-organizer of the 1st and 2nd e-Prevention SPGC challenge (ICASSP)	2023, 2024
Session Chair at ICASSP 2023, IROS 2025	
Invited participant, Dagstuhl Seminar 18422: Shape Analysis	Oct. 2018
Reviewer for CVPR, NeuRIPS, ICCV, ICML, SIGGRAPH, IROS, ICASSP, EUSIPCO, WACV, ICIP, RAL, CSL	

COMPLETE PUBLICATION LIST

Google Scholar: [🔗 Profile](#) | 50+ publications | 900+ citations | h-index: 17

Journal Publications

- [J01] V. Garyfalli, E. Kalisperakis, ..., **P.P. Filntisis**, N. Efthymiou, A. Zlatintsi, P. Maragos, N. Smyrnis, “Smartwatch-Derived Digital Phenotypes Relate to Psychopathology Dimensions in Patients With Psychotic Spectrum Disorders: Longitudinal Observational Study,” *JMIR Mental Health*, vol. 12, 2025.
- [J02] A. Zlatintsi, **P.P. Filntisis**, N. Efthymiou, C. Garoufis, G. Retsinas, P. Maragos, “Person Identification and Relapse Detection from Continuous Recordings of Biosignals Challenge: Overview and Results,” *IEEE Open Journal of Signal Processing*, vol. 5, pp. 641–651, 2024.
- [J03] E. Kalisperakis, T. Karantinos, ..., **P.P. Filntisis**, ..., N. Smyrnis, “Smartwatch Digital Phenotypes Predict Positive and Negative Symptom Variation in a Longitudinal Monitoring Study,” *Frontiers in Psychiatry*, vol. 14, 2023.
- [J04] A. Zlatintsi, **P.P. Filntisis**, C. Garoufis, ..., N. Smyrnis, “E-Prevention: Advanced Support System for Monitoring and Relapse Prevention in Patients with Psychotic Disorders,” *Sensors*, vol. 22, 2022.
- [J05] N. Efthymiou, **P.P. Filntisis**, P. Koutras, A. Tsiami, J. Hadfield, G. Potamianos, P. Maragos, “Childbot: Multi-Robot Perception and Interaction with Children,” *Robotics and Autonomous Systems*, vol. 150, 2022.
- [J06] N. Efthymiou, **P.P. Filntisis**, G. Potamianos, P. Maragos, “Visual Robotic Perception System with Incremental Learning for Child-Robot Interaction Scenarios,” *Technologies*, vol. 9, no. 4, 2021.
- [J07] **P.P. Filntisis**, N. Efthymiou, G. Potamianos, P. Maragos, “Fusing Body Posture with Facial Expressions for Joint Recognition of Affect in Child-Robot Interaction,” *IEEE Robotics and Automation Letters*, vol. 4, no. 4, pp. 4011–4018, 2019.
- [J08] **P.P. Filntisis**, A. Katsamanis, P. Tsiakoulis, P. Maragos, “Video-Realistic Expressive Audio-Visual Speech Synthesis for the Greek Language,” *Speech Communication*, vol. 95, pp. 137–152, 2017.

Book Chapters

- [B01] **P.P. Filntisis**, N. Efthymiou, G. Potamianos, P. Maragos, “Visual Emotion Recognition from Multiple Cues Using Deep Learning,” in *Topics in Computer Vision and Machine Learning*, Kallipos, 2025.
- [B02] **P.P. Filntisis**, N. Efthymiou, G. Potamianos, P. Maragos, “Multi-Stream Temporal Networks for Emotion Recognition in Children and in the Wild,” in *Modeling Visual Aesthetics, Emotion, and Artistic Style*, Springer, 2023.

Conference Publications

- [C01] **P.P. Filntisis**, G. Retsinas, R. Danecek, V. Sklyarova, P. Maragos, T. Bolkart, “Registration-Free Learnable Multi-View Capture of Faces in Dense Semantic Correspondence,” *CVPR*, 2026.
- [C02] G. Chatzichristodoulou, N. Efthymiou, **P.P. Filntisis**, G. Pavlakos, P. Maragos, “Age-Inclusive 3D Human Mesh Recovery for Action-Preserving Data Anonymization,” *CVPR-W*, 2026.
- [C03] K. Chaldaiopoulou, N. Efthymiou, A. Zlatintsi, **P.P. Filntisis**, K. Pastra, P. Maragos, “PredJSal: Video Saliency via Predictive Self-Supervised Representations,” *CVPR-W*, 2026.
- [C04] B. Psomas, G. Retsinas, N. Efthymiadis, **P. Filntisis**, Y. Avrithis, P. Maragos, O. Chum, G. Toliás, “Instance-Level Composed Image Retrieval,” *NeurIPS*, 2025.
- [C05] T. Aravanis, **P. Filntisis**, P. Maragos, G. Retsinas, “Only-Style: Stylistic Consistency in Image Generation without Content Leakage,” *ICCV-W (Best Paper Award)*, 2025.
- [C06] **P.P. Filntisis**, E. Tsaprazlis, P. Oikonomou, F. Mattioli, V.G. Santucci, G. Baldassarre, P. Maragos, G. Retsinas, “Towards Open-Ended Robotic Exploration Using Vision-Inspired Similarity and Foundation Models,” *ICRA*, 2025.
- [C07] K. Papadimitriou, **P. Filntisis**, G. Retsinas, G. Potamianos, P. Maragos, “Seeing in 2D, Thinking in 3D: 3D Hand Mesh-Guided Feature Learning for Continuous Fingerspelling,” *ICCV-W*, 2025.
- [C08] M. Glytsos, **P.P. Filntisis**, G. Retsinas, P. Maragos, “Category-Level 6D Object Pose Estimation in Agricultural Settings Using a Lattice-Deformation Framework and Diffusion-Augmented Synthetic Data,” *IROS*, 2025.
- [C09] N. Giannakakis, A. Manetas, **P.P. Filntisis**, P. Maragos, G. Retsinas, “Object-Centric Action-Enhanced Representations for Robot Visuo-Motor Policy Learning,” *ICDL*, 2025.
- [C10] C. Pratikaki, **P.P. Filntisis**, A. Katsamanis, A. Roussos, P. Maragos, “A Transformer-Based Framework for Greek Sign Language Production using Extended Skeletal Motion Representations,” *PETRA (Best Paper Award)*, 2025.
- [C11] C. Pratikaki, S.-E. Fotinea, E. Efthimiou, **P.P. Filntisis**, A. Roussos, P. Maragos, “Text-to-Sign Language Production via Intermediate Skeletal Representations Using Transformers and Neural Rendering,” *IUI Adjunct*, 2025.
- [C12] D.N. Makropoulos, **P.P. Filntisis**, A. Prospathopoulos, D. Kassis, A. Tsiami, P. Maragos, “Improving Classification of Marine Mammal Vocalizations Using Vision Transformers and Phase-Related Features,” *DSP*, 2025.
- [C13] C. Garoufis, M. Glytsos, I. Chourdaki, **P.P. Filntisis**, P. Maragos, “Power in Unity: Combining In-Domain and Out-of-Domain Pre-Training Strategies for EEG-Based Person Identification,” *ICASSP*, 2025.
- [C14] G. Retsinas*, **P.P. Filntisis***, R. Danecek, V.F. Abrevaya, A. Roussos, T. Bolkart, P. Maragos, “3D Facial Expressions through Analysis-by-Neural-Synthesis,” *CVPR*, 2024.
- [C15] N. Efthymiou, G. Retsinas, **P.P. Filntisis**, P. Maragos, “Augmenting Transformer Autoencoders with Phenotype Classification for Robust Detection of Psychotic Relapses,” *ICASSP*, 2024.
- [C16] **P.P. Filntisis**, N. Efthymiou, G. Retsinas, A. Zlatintsi, C. Garoufis, P. Maragos, “The 2nd e-Prevention Challenge: Psychotic and Non-Psychotic Relapse Detection Using Wearable-Based Digital Phenotyping,” *ICASSP*, 2024.
- [C17] **P.P. Filntisis**, G. Retsinas, F. Paraperas-Papantoniou, A. Katsamanis, A. Roussos, P. Maragos, “SPECTRE: Visual Speech-Informed Perceptual 3D Facial Expression Reconstruction from Videos,” *CVPR-W*, 2023.
- [C18] **P.P. Filntisis**, G. Retsinas, F. Paraperas-Papantoniou, A. Katsamanis, A. Roussos, P. Maragos, “Visual Speech-Aware Perceptual 3D Facial Expression Reconstruction from Videos,” *CVPR-W*, 2023.
- [C19] N. Kegkeroglou, **P.P. Filntisis**, P. Maragos, “Medical Face Masks and Emotion Recognition from the Body: Insights from a Deep Learning Perspective,” *PETRA*, 2023.
- [C20] A. Zlatintsi, **P.P. Filntisis**, ..., P. Maragos, “e-Prevention: The ICASSP-2023 Challenge on Person Identification and Relapse Detection from Continuous Recordings of Biosignals,” *ICASSP*, 2023.

- [C21] E. Fekas, A. Zlatintsi, **P.P. Filntisis**, ..., P. Maragos, "Relapse Prediction from Long-Term Wearable Data Using Self-Supervised Learning and Survival Analysis," *ICASSP*, 2023.
- [C22] G. Retsinas, G. Sfikas, **P.P. Filntisis**, P. Maragos, "Newton-Based Trainable Learning Rate," *ICASSP*, 2023.
- [C23] A. Rios, U. Reichel, ..., **P. Filntisis**, ..., S. Ebling, "Multimodal Recognition of Valence, Arousal and Dominance via Late-Fusion of Text, Audio and Facial Expressions," *ESANN*, 2023.
- [C24] N. Efthymiou, G. Retsinas, **P.P. Filntisis**, C. Garoufis, A. Zlatintsi, P. Maragos, "From Digital Phenotype Identification to Detection of Psychotic Relapses," *IEEE ICHI*, 2023.
- [C25] D. Anagnostopoulou, G. Retsinas, N. Efthymiou, **P. Filntisis**, P. Maragos, "A Realistic Synthetic Mushroom Scenes Dataset," *CVPR-W*, 2023.
- [C26] F. Paraperas Papantoniou, **P.P. Filntisis**, P. Maragos, A. Roussos, "Neural Emotion Director: Speech-Preserving Semantic Control of Facial Expressions in In-the-Wild Videos," *CVPR (Oral – Best Paper Finalist)*, 2022.
- [C27] C.O. Tze, **P.P. Filntisis**, A. Roussos, P. Maragos, "Cartoonized Anonymization of Sign Language Videos," *IVMSP*, 2022.
- [C28] G. Retsinas, **P.P. Filntisis**, N. Kardaris, P. Maragos, "Attribute-Based Gesture Recognition: Generalization to Unseen Classes," *IVMSP*, 2022.
- [C29] C. Garoufis, A. Zlatintsi, **P.P. Filntisis**, ..., P. Maragos, "Towards Unsupervised Subject-Independent Speech-Based Relapse Detection in Patients with Psychosis Using Variational Autoencoders," *EUSIPCO*, 2022.
- [C30] M. Panagiotou, A. Zlatintsi, **P.P. Filntisis**, ..., P. Maragos, "A Comparative Study of Autoencoder Architectures for Mental Health Analysis Using Wearable Sensors Data," *EUSIPCO*, 2022.
- [C31] P. Antoniadis, **P.P. Filntisis**, P. Maragos, "Exploiting Emotional Dependencies with Graph Convolutional Networks for Facial Expression Recognition," *FG*, 2021.
- [C32] P. Antoniadis, I. Pikoulis, **P.P. Filntisis**, P. Maragos, "An Audiovisual and Contextual Approach for Categorical and Continuous Emotion Recognition In-the-Wild," *CVPR-W*, 2021.
- [C33] I. Pikoulis, **P.P. Filntisis**, P. Maragos, "Leveraging Semantic Scene Characteristics and Multi-Stream Convolutional Architectures in a Contextual Approach for Video-Based Visual Emotion Recognition in the Wild," *FG*, 2021.
- [C34] **P.P. Filntisis**, N. Efthymiou, G. Potamianos, P. Maragos, "An Audiovisual Child Emotion Recognition System for Child-Robot Interaction Applications," *EUSIPCO*, 2021.
- [C35] N. Efthymiou, **P.P. Filntisis**, G. Potamianos, P. Maragos, "A Robotic Edutainment Framework for Designing Child-Robot Interaction Scenarios," *PETRA*, 2021.
- [C36] C. Garoufis, A. Zlatintsi, **P.P. Filntisis**, N. Efthymiou, P. Maragos, "An Unsupervised Learning Approach for Detecting Relapses from Spontaneous Speech in Patients with Psychosis," *BHI*, 2021.
- [C37] **P.P. Filntisis**, N. Efthymiou, G. Potamianos, P. Maragos, "Emotion Understanding in Videos through Body, Context, and Visual-Semantic Embedding Loss," *ECCV-W (Challenge Winner)*, 2020.
- [C38] G. Retsinas, **P.P. Filntisis**, N. Efthymiou, E. Theodosis, A. Zlatintsi, P. Maragos, "Person Identification Using Deep CNNs on Short-Term Signals from Wearable Sensors," *ICASSP*, 2020.
- [C39] I. Maglogiannis, A. Zlatintsi, ..., **P.P. Filntisis**, ..., P. Maragos, "An Intelligent Cloud-Based Platform for Effective Monitoring of Patients with Psychotic Disorders," *IFIP AIAI*, 2020.
- [C40] C. Garoufis, A. Zlatintsi, K. Kritsis, **P.P. Filntisis**, V. Katsouros, P. Maragos, "An Environment for Gestural Interaction with 3D Virtual Musical Instruments as an Educational Tool," *EUSIPCO*, 2019.
- [C41] A. Tsiami, **P.P. Filntisis**, N. Efthymiou, P. Koutras, G. Potamianos, P. Maragos, "Far-Field Audio-Visual Scene Perception of Multi-Party Human-Robot Interaction," *ICASSP*, 2018.
- [C42] N. Efthymiou, **P.P. Filntisis**, P. Koutras, G. Potamianos, P. Maragos, "Multi-View Fusion for Action Recognition in Child-Robot Interaction," *ICIP*, 2018.
- [C43] A. Tsiami, P. Koutras, N. Efthymiou, **P.P. Filntisis**, G. Potamianos, P. Maragos, "Multi3: Multi-Sensory Perception System for Multi-Modal Child Interaction with Multiple Robots," *ICRA*, 2018.
- [C44] A. Zlatintsi, **P.P. Filntisis**, C. Garoufis, ..., P. Maragos, "A Web-Based Real-Time Kinect Application for Gestural Interaction with Virtual Musical Instruments," *AudioMostly*, 2018.
- [C45] **P.P. Filntisis**, A. Katsamanis, P. Maragos, "Photorealistic Adaptation and Interpolation of Facial Expressions Using HMMs and AAMs for Audio-Visual Speech Synthesis," *ICIP*, 2017.

Preprints / Under Review

- [P01] N. Chatzis*, A. Tsinouka*, K. Papadimitriou, N. Efthymiou, M. Glytsos, G. Retsinas*, P. Oikonomou, G. Potamianos, P. Maragos, **P.P. Filntisis**, “Mind the Shape Gap: A Benchmark and Baseline for Deformation-Aware 6D Pose Estimation of Agricultural Produce,”
- [P02] A. Tsinouka, G. Retsinas, P. Maragos, **P.P. Filntisis**, “Occlusion-Robust 4D Face Reconstruction with Audio-Visual Synchronization,”
- [P03] K. Spathis, N. Efthymiou, **P.P. Filntisis**, P. Maragos, “HIDE: towards High-fidelity Image De-identification with Expression Preservation,”
- [P04] S. Zarifis, I. Chalkiadakis, ..., **P.P. Filntisis**, P. Maragos, G. Retsinas, “Baby Sophia: A Developmental Approach to Self-Exploration through Self-Touch and Hand Regard,” *arXiv:2511.09727*, 2025.
- [P05] G. Chatzichristodoulou, N. Efthymiou, **P. Filntisis**, G. Pavlakos, P. Maragos, “Age-Inclusive 3D Human Mesh Recovery for Action-Preserving Data Anonymization,” *arXiv:2512.05259*, 2025.
- [P06] I. Pikoulis, **P.P. Filntisis**, P. Maragos, “Photorealistic and Identity-Preserving Image-Based Emotion Manipulation with Latent Diffusion Models,” *arXiv:2308.03183*, 2023.
- [P07] G. Milis, **P.P. Filntisis**, A. Roussos, P. Maragos, “Neural Text to Articulate Talk: Deep Text to Audiovisual Speech Synthesis Achieving Both Auditory and Photo-Realism,” *arXiv:2312.06613*, 2023.
- [P08] C.O. Tze, **P.P. Filntisis**, A. Dimou, A. Roussos, P. Maragos, “Neural Sign Reenactor: Deep Photorealistic Sign Language Retargeting,” *arXiv:2209.01470*, 2022.
- [P09] **P.P. Filntisis**, A. Zlatintsi, N. Efthymiou, ..., P. Maragos, “Identifying Differences in Physical Activity and Autonomic Function Patterns Between Psychotic Patients and Controls,” *arXiv:2011.02285*, 2020.