Christina Ourania Tze

♦ Chatzopoulou 33, Kallithea, 17671, Athens, Greece \$\star\$+30 6957248408

EDUCATION

National Technical University of Athens (NTUA)

09/2016 - 10/2022

Joint BSc & MEng in Electrical Engineering (5 year degree; equivalent to 300 ECTS credits)

- GPA: 9.23/10 (top 4%)
- Concentration: Signals, Automatic Control and Robotics & Computer Systems & Computer Software
- Master's Thesis on "Video Anonymization and Neural Rendering of Photo-realistic Human Actor Videos with applications to Sign Language", supervised by Prof. Petros Maragos (NTUA) and co-advised by Dr. Anastasios Roussos (FORTH). Grade: 10/10

Senior High School of Kastritsi, Patras

09/2013 - 06/2016

• High School Diploma: 19.9/20 (Valedictorian)

• Nationwide University Entrance Examination: 19,030/20,000

RESEARCH EXPERIENCE

Research Assistant, Archimedes Research Unit, Athena Research and Innovation Center 03/2023 - 06/2023

- Working as a team coordinator for a research project entitled "Data for Social Good", which is implemented in collaboration with the Hellenic Corporation of Assets and Participations (HCAP) and the Archimedes Unit of the Athena Research Center.
- Developing applications and tools for bus passenger flow prediction/ridership forecasting.

Research Intern, Archimedes Research Unit, Athena Research and Innovation Center

06/2022 - 07/2022

- Interacted and worked with a large number of Greek and international researchers, junior and senior.
- Attended many crash courses and seminar slots covering a diverse set of areas (machine learning, data science, etc.).
- Joined the Computer Vision group (led by Prof. Kostas Daniilidis, Alex Dimakis and Katerina Fragkiadaki) and expanded knowledge of state-of-the-art techniques (event-based vision, deep generative models, 3D scene representations, etc.) in the field.

Undergraduate Research Assistant, CVSP-IRAL Lab, NTUA

05/2021 - 10/2022

- Completed my Master's Thesis by diving deeply into the Computer Vision and Sign Language Processing fields, Video Anonymization, Photo-realistic Human Video Synthesis and Human Motion Retargeting techniques based on Neural Rendering.
- Developed a novel approach for anonymizing videos using animated cartoon characters instead of the original human actors. Our work [1] is accepted to the 2022 IEEE Image, Video, and Multidimensional Signal Processing Workshop (IVMSP).
- Developed a novel, deep learning-based method for body reenactment, transferring the body movements, head pose, facial expressions and eye gaze of a source actor in a driving video to a target subject in a photo-realistic output video. Our work [2] is accepted to the 2023 AI for Content Creation Workshop (AI4CC).

GRADES (selected)

Courses	Grades
Computer Vision	8/10
Speech and Natural Language Processing	8/10
Pattern Recognition	9/10
Neural Networks and Intelligent Systems	9/10
Artificial Intelligence	10/10
Image and Video Analysis and Technology	10/10
Robotics I: Analysis-Control-Laboratory	10/10

ICASSP 2023 Volunteer 06/2023

• Volunteer in the organization of the 2023 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) to be held in Rhodes, Greece, between 4 – 10 June 2023.

First Lego League - Robot Design Judge

02/2019

• In charge of assessing participant teams in terms of Strategy, Innovation, Mechanical Design, Programming and Navigation of their robots.

Unique Minds - ECE Workshop Presenter

05/2018

• Designing and presenting the hardware workshop for the Electrical and Computer Engineering (ECE) School of the National Technical University of Athens.

SPIN Space-Innovation - Logistics Team

09/2017 - 06/2018

• Responsible for order fulfillment and supply chain coordination for the CanSat competition in Greece.

SKILLS

Programming Languages: Python, C/C++, MATLAB, LaTeX

Tools and libraries: OpenCV, TensorFlow, PyTorch, Keras, Pandas, SciPy, Scikit-learn, Scikit-image, Git

Languages: Greek (Native Language), English (Full Professional Proficiency),

French (Elementary Proficiency)

HONORS & AWARDS

"Archimedes" Summer Program 2022

06/2022

• Accepted to the 8-week-long Archimedes Summer Program that focused on the foundations of Machine Learning (ML), Artificial Intelligence (AI), Data Science and their supporting disciplines.

"The Great Moment for Education", Eurobank EFG Scholarship

12/2016

• Achieving the highest score at the nationwide university entrance exam among students in my high school.

RESEARCH PRESENTATIONS

• "Cartoonized Anonymization of Sign Language Videos", IEEE Image, Video, and Multidimensional Signal Processing Workshop, Nafplio, Greece, June 2022 (Oral)

PUBLICATIONS

- [1] Christina O. Tze, Panagiotis P. Filntisis, Anastasios Roussos, and Petros Maragos. "Cartoonized Anonymization of Sign Language Videos". In: *IEEE 14th Image, Video, and Multidimensional Signal Processing Workshop (IVMSP)*. 2022.
- [2] Christina O. Tze, Panagiotis P. Filntisis, Athanasia-Lida Dimou, Anastasios Roussos, and Petros Maragos. "Neural Sign Reenactor: Deep Photorealistic Sign Language Retargeting". In: *IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (CVPRW)*. 2023.