Sayeh GHOLIPOUR PICHA
Computer Vision Researcher | Ph.D. Student

🏛 GIPSA-Lab, Grenoble INP University   📍 Grenoble, France
📱 +(33) 6 21 04 53 35   @ sayeh.gholipour@gmail.com   @ sayeh.gholipour-picha@gipsa-lab.grenoble-inp.fr
in linkedin.com/in/sayeh-gholipour-picha-6398717b/   ○ github.com/sayeh1994   % sayehgholipourpicha.com

👤 SUMMARY

As a first-year Ph.D. student in computer vision at the GIPSA laboratory in France, I am currently working on explainable AI in medical image prediction. I graduated from Grenoble INP university in signal and image processing. As part of my graduation thesis, I focused on generating facial expression recognition for model enhancement. Prior to my master's program, I have two years of professional experience as a python developer in various image processing.

⭐ RESEARCH INTERESTS

> eXplainable AI (XAI)
> Anomaly Detection
> Domain Adaptation
> Autonomous Vehicles
> Generative Models

🎓 EDUCATION

2022 - Present   **Ph.D. in Computer Vision**, University of Grenoble INP, GIPSA-Lab, France.
> **Thesis title :** How to trust Deep Learning-based system predictions?
> **Supervisors :** Dr. Dawood AL CHANTI, Prof. Alice CAPLIER.

eXplainable AI (XAI) | Computer Vision | NLP | Medical Image Processing

2021 - 2022   **M.Sc. in Signal and Image Processing**, University of Grenoble INP, France.
> **Scholarship Student.**
> **GPA :** 14.82/20.
> **Thesis title :** How far generated data can improve Neural Networks' performance?
> **Supervisors :** Prof. Alice CAPLIER, Dr. Dawood AL CHANTI.

Deep Learning | GANs | CNN | Tensorflow | Pytorch | Facial Expression Recognition

2020 - 2021   **M.Sc. in Data Science, Linking Experiment to Theory**, University of Grenoble INP, France.
> **GPA :** 14.59/20.
> **Thesis title :** Guiding Human percept of an ambiguous moving plaid by the Random Dot Kinematograms and Bistable moving plaids
> **Supervisors :** Dr. Ronald PHLYPO, Prof. Alan CHAUVIN.

Cognition Image Processing | Psychopy Library (Python)

2012 - 2016   **B.Sc. in Electrical Engineering - Telecommunication**, Shiraz University, Iran.
> **GPA :** 16.95/20
> **Thesis title :** Review project on Steganography in Images and Implementation of the methods.
> **Supervisors :** Alireza Keshavarz Hadad.

Cyber Security | Matlab | Image Processing

📑 PUBLICATIONS

> Gholipour Picha, S.; Al Chanti, D. and Caplier, A. (2023). How far Generated Data Can Impact Neural Networks Performance?. In Proceedings of the 18th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications - Volume 5 : VISAPP, ISBN 978-989-758-634-7; ISSN 2184-4321, pages 472-479. ⬀ DOI : 10.5220/0011629000003417

💼 PROFESSIONAL EXPERIENCE

January 2018
June 2020   Research & Development Member, ⬀ FARABINA SMART COMPANY , Babol, Iran
Developing a thermal camera-based device for non-destructive water leak detection.
> Developed a module to detect pipes' cracks and fractures inside a wall with a thermal camera in my role as a junior developer.
> Thermal camera (Flir) image processing.
> Python programming on Raspberry Pi 3.

Thermal Image Processing | Python | Raspberry pi3 | Junior Developer

March 2017 December 2017	**Data Analyst,** ⧉ ɪRᴏᴀᴅ Eʟᴇᴄᴛʀᴏɴɪᴄ Aʀɪʏᴀ Cᴏᴍᴘᴀɴʏ , Tehran, Iran Online traffic counter systems, camera systems, and road data collection systems in urban roads and sub-urban areas. › Processed and analyzed data received periodically via GSM containing cars' average speed, traffic counter, and license plate recognition, etc. › Implemented a SQL module to retrieve and send the processed data to the national road and transportation organization. MySQL · GSM · Junior Data Processor
September 2014 September 2016	**Part-time job,** Aꜱɪᴀ-Tᴇᴄʜ, Shiraz, Iran Junior Software and Hardware Engineer, testing the new network equipment for Shiraz university establishment. › Assist in the installation of new network equipment and provide IT support to university dormitories. › Support and troubleshoot students' software issues. Linux · Junior Software Engineer

☰ Pʀᴏꜰᴇꜱꜱɪᴏɴᴀʟ Sᴋɪʟʟꜱ

Development Skills	Python, Matlab, Linux, Git, Azure, C, LᴬTEX.
Research Skills	Deep Neural Networks, Machine Learning, Optimization Algorithm.

</> Lᴀɴɢᴜᴀɢᴇ Sᴋɪʟʟꜱ

English ●●●●○
French ●●●○○

✚ Sᴛʀᴇɴɢᴛʜꜱ

› Teamwork
› Problem Solving
› Adaptability

🖥 Pʀᴏᴊᴇᴄᴛꜱ

Dᴀᴛᴀ Cʜᴀʟʟᴇɴɢᴇ ᴄᴏᴍᴘᴇᴛɪᴛɪᴏɴ ꜰᴏʀ Aᴜᴛᴏᴍᴀᴛɪᴄ Nᴏ-Rᴇꜰᴇʀᴇɴᴄᴇ Iᴍᴀɢᴇ Sʜᴀʀᴘɴᴇꜱꜱ Aꜱꜱᴇꜱꜱᴍᴇɴᴛ ɪɴ Iɴꜰʀᴀʀᴇᴅ Iᴍᴀɢᴇꜱ Jᴜɴᴇ 2021
⧉ Lynred ⧉ Project Description
Lynred is a company specializing in the development of advanced infrared detectors. Master's students participated in this competition to measure their performance in a variety of objective and subjective problem-solving fields. We were accepted by the contest jury and the company itself with our newly developed algorithm..
Infrared Image Processing · Python · Matlab · Team Working

🎓 Cᴇʀᴛɪꜰɪᴄᴀᴛɪᴏɴꜱ

June 2022	Giving a speech at Gdr ISIS Face, gestures, actions and behavior seminar at Sorbonne university.
Feb 2022	Facial Expression Recognition with Keras ⧉ Certificate
June 2019	Programming Fundamentals crouse from Duke university ⧉ Certificate
Feb 2017	Machine Learning course from Stanford university presented by Andrew Ng.

💡 Vᴏʟᴜɴᴛᴇᴇʀ Exᴘᴇʀɪᴇɴᴄᴇ

2014 - 2015	Chief of IEEE council, Branch of Shiraz University.
2013 - 2014	Financial Manager at IEEE council, Branch of Shiraz University.
2014	Academic Student Association : CST, ADS, and Altium Workshops facilitator.

❝ Rᴇꜰᴇʀᴇɴᴄᴇꜱ

Dawood AL CHANTI
Lecturer, Gʀᴇɴᴏʙʟᴇ INP Uɴɪᴠᴇʀꜱɪᴛʏ
@ dawood.al-chanti@gipsa-lab.grenoble-inp.fr

Alice CAPLIER
Full Professor, Gʀᴇɴᴏʙʟᴇ INP Uɴɪᴠᴇʀꜱɪᴛʏ
@ alice.caplier@gipsa-lab.grenoble-inp.fr