

# Sayeh GHOLIPOUR PICHA

Researcher | Ph.D. Student

eXplainable AI (XAI), Computer Vision, Natural Language Processing (NLP)

 GIPSA-Lab, Grenoble INP University  Grenoble, France

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## PROFESSIONAL SKILLS

**Development Skills** Python, Pytorch, Tensorflow, Transformers, Matlab, Linux, Git, Azure, C.

**Research Skills** Pattern Recognition, Semantic Segmentation, Natural Language Processing,  $\LaTeX$ .

## 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.

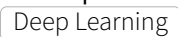



2021 - 2022 **M.Sc. in Signal and Image Processing**, University of Grenoble INP, France.

> **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.

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.

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.

## 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 **Research & Development Member**,  **FARABINA SMART COMPANY** , Babol, Iran

June 2020 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 and Python programming on Raspberry Pi 3.

> Led to patent registration.




   

March 2017 **Data Analyst**,  **IROAD ELECTRONIC ARIYA COMPANY** , Tehran, Iran

December 2017 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.



  

September 2014 September 2016	<b>Part-time job, ASIA-TECH, Shiraz, Iran</b> 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. <span>Linux</span> <span>Junior Software Engineer</span>
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## TEACHING EXPERIENCE

2023-2024	<b>Deep Learning Project Course, PRESENTATION ON HOW TO USE THE UNIVERSITY'S SERVER INFRASTRUCTURE FOR GPU TRAINING, 3rd year Engineering Program</b> Phelma Grenoble INP University <span>Python</span> <span>Shell</span>
2022-2023	<b>Data Analysis Course, LAB ASSISTANCE PROFESSOR, 2nd year Engineering Program</b> Phelma Grenoble INP University <span>PSD</span> <span>Matlab</span>

## COMPETITIONS

<b>DATA CHALLENGE COMPETITION FOR AUTOMATIC NO-REFERENCE IMAGE SHARPNESS ASSESSMENT IN INFRARED IMAGES</b>  <a href="#">Lynred</a>  <a href="#">Project Description</a> Lynred is a company specializing in the development of advanced infrared detectors. Master's students participated in this competition to measure their performance in various objective and subjective problem-solving fields. We were accepted by the contest jury and the company itself with our newly developed algorithm.. <span>Infrared Image Processing</span> <span>Python</span> <span>Matlab</span> <span>Team Working</span>	JUNE 2021
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## LANGUAGE SKILLS

English	● ● ● ● ○
French	● ● ● ○ ○
Persian	● ● ● ● ●
Japanese	● ○ ○ ○ ○


## STRENGTHS

- > Problem-solving
- > Analytic Skills
- > Adaptability
- > Perseverance and commitment

## CERTIFICATIONS

November 2023	AutoML Fall School at LMU Munich
July 2023	Bumblekit Machine Learning Summer School in Healthcare and Biosciences at ETH Zürich.
June 2022	Giving a speech at Gdr ISIS Face, gestures, actions, and Behavior seminar at Sorbonne University.
Feb 2022	Facial Expression Recognition with Keras Course  <a href="#">Certificate</a>
2021 - 2022	Granted Persyval Full Scholarship for 2nd year of master's study in France.
June 2019	Programming Fundamentals course from Duke university  <a href="#">Certificate</a>
Feb 2017	Machine Learning course from Stanford University presented by Andrew Ng.

## VOLUNTEERING EXPERIENCE

2023 - Present	Exchange and IT Volunteer  <a href="#">IAESTE France</a>
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.

## REFERENCES

### Dawood AL CHANTI

Lecturer, GRENoble INP UNIVERSITY

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### Alice CAPLIER

Full Professor, GRENoble INP UNIVERSITY

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