PERSONAL INFORMATION PAOLO FAZZINI

📍 Affiliation
   CNR-IIA (National Council of Research, Institute of Atmospheric Pollution)

   Address: Montelibretti

📞 0696039142   📠 3395309697

✉ paolo.fazzini@iia.cnr.it

Sex M| *Date of birth* 10/12/1969 | *Nationality* Italian

Enterprise	University	EPR
■ Management Level	☐ Full professor	☐ Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator
■ Mid-Management Level	☐ Associate Professor	☐ Level III Researcher and Technologist
■ Employee / worker level	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	■ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

(Jan 2018 - present)

Research Fellow

CNR-IIA

- Vehicle Traffic optimization with Multi-Agent Reinforcement Learning
- Mixed Cooperative/Competitive Behavior analysis of Multi-Agent systems with
- Reinforcement Learning and Natural Evolution Strategies
- Time Series analysis and forecasting with LSTM-based networks, Sarima and
- FBProphet
- Vegetation classification with Remote Sensing and Convolutional Neural Nets

Business or sector machine learning

(Sept 2016 - Dec 2017)

Senior Researcher

Photonic Design Ltd

- Research Engineer at Photonic Designs Ltd (London, UK):
- S/W Simulations, H/W prototyping
- Senior Research Engineer
- Fluid dynamic modeling of air-structure interactions

Business or sector Fluid-Dynamic Modeling

(Jan 2001 - May 2016)

Senior Researcher

Imagination Technologies

- Patent topics available at: https://patents.justia.com/inventor/paolo-fazzini
- Intellectual Property – H/W and S/W Design
- Senior Research Engineer
- 2D and 3D graphics
- Digital Video Processing (De-interlacing, Noise Removal, Super Resolution, Y/C separation)
- Digital Image Processing
- Gamut Mapping
- Neural Networks for artifact detection, noise-removal, super-resolution and
- Semantic Segmentation
- Efficient bump mapping
- Image compression

Business or sector Digital Video and Image Processing; 2D and 3D Graphics; Machine Learning;

EDUCATION AND TRAINING

(Oct 1988 – Oct 1994)   Master Degree in Nuclear Engineering
School of Engineering – University of Bologna
Mathematical and computational modeling

Patents
- WO EP US JP GB US7733352B2
- WO EP US JP GB EP1623568B1
- US GB US20200342831A1
- WO EP US JP GB US20060181647A1
- WO JP US20060176394A1
- WO EP US JP GB US20060176393A1
- WO EP US JP GB US20060053086A1
- WO EP US CN GB GB2484071B

Publications
- Sentinel-2 Remote Sensed Image Classification with Patchwise Trained ConvNets for Grassland Habitat Discrimination
- Traffic Signal Control with Communicative Deep Reinforcement Learning Agents: a Case Study
- Effects of Smart Traffic Signal Control on Air Quality

Rome 18/02/22