# Gianluca Scarpellini

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# Looking for a Ph.D. in Computer Vision and Deep Learning

# **Education**

Università degli studi di Milano - Bicocca [notes repository]

Milano, Italy

B.S. IN COMPUTER SCIENCE (GPA 29.5/30, FINAL GRADE 110L/110)

Sep 2015 - Jul 2018

M.S. IN COMPUTER SCIENCE (GPA 29.45/30)

Oct 2018 - Oct 2020

Major in Computer Science and Minor in Applied machine learning

**Udacity** 

DEEP REINFORCEMENT LEARNING [PROJECTS REPOSITORY]

Mar 2020 - Apr 2020

SOFTWARE ROBOTICS ENGINEERING

Apr 2020 - May 2020

# **Experience**

**Visiting Scientist** 

Genova, Italy

ITALIAN INSTITUTE OF TECHNOLOGY @ PAVIS

Mar 2020 -

- · Event-based machine vision research
- Developed methods for events-to-frame generation
- Trained models for dynamic behavior classification from events stream with precision/recall > 95% (Pytorch)

**DL Research Intern** Milano, Italy

ARGO Vision May 2019 - Jan 2020

- Trained state-of-the-art models for aerial semantic segmentation with IOU > 80% (Keras, Hyperopt)
- Trained models for car model and maker classification (200 classes) with accuracy > 80% (Keras)
- Adapted a plate detection & OCR pipeline for raspberry pi (Keras, Darknet, Tensorflow lite)

**Back-end developer** Bergamo, Italy

FLASH DELIVERY

• Developed server applications (ASP.NET, Node.JS) with > 2.000 active users

Projects.

B.s. thesis — Python

**Insertion Matcher** github

Unimih Jan 2020

Feb 2018 - Jul 2018

Jun 2017 - Sep 2019

PROJECT — PYTHON

- Pipeline for linking product insertions based on title only
- Trained NLP models with state of the art performance using hyperparameters optimization (Pytorch, PyGPGO)
- > 86% F1-score on Gold Standard

### On road object detection from RGB and LIDAR data github

Image and Vision Lab, Unimib

· Generated RGBD from RGB and LIDAR data

- Trained object detection & recognition models (Pytorch, Darknet)
- > 60% mAP on benchmark dataset (KITTI Benchmark Suite)

Chess Detection github Unimib

PROJECT — MATLAB Feb 2018

- · Implemented a pipeline for chessboard detection and geometry perspective correction in real scenarios
- · Trained chess pieces classifier
- Overall score > 99% (12 classes)

# Skills

# Computer skills and frameworks

PROFICIENCY IN

- Python (OpenCV, Tensorflow, Pytorch, Keras, Scikit-learn)
- Matlab (Matlab Computer Vision toolkit, Image Processing Toolkitt)
- C++ (OpenCV, Event-based vision SDKs)

## Languages

PROFICIENCY IN

- Italian Mother tongue
- English Business fluent