

# Francesco Argentieri

junior mechanic engineer

## contact

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in Francesco Argentieri  
s francesco\_argentieri

## languages

Italian—mother tongue  
English—upper  
intermediate

## education

- 2015–Now **M. Sc.** Mechatronics Engineering University of Trento  
*Student*  
Specialization in Mechanics–mechatronics
- 2008–2015 **Bachelor** Mechanics Engineering Marche Polytechnic University  
Thesis "*Structural analysis of an automotive hot formed sheet component with variable thickness*".  
Specialization in Energy-thermomechanical

## experience

- 9/2018–11/2018 **University of Trento** Trento, Italy  
*Rapid development CNN for image classification using fine-tuning techniques and implementation on SoC systems*  
Thanks to the use of framework like Keras is possible to develop refinement techniques starting from already known models. There is discussion of the architecture of a USB commercial device, Intel Movidius neural compute stick, with low power consumption for neural network execution on SoC systems such as Raspberry. Finally, there are the problems and limitations that occurred during the development and distribution of the software implemented.  
**software:** Python 3.6, Keras, Tensorflow, Altair PBS (HPC) 🔒
- 9/2017–6/2018 **University of Trento** Trento, Italy  
*Distributed robots mapping exploration*  
Project for the final exam where we consider the problem of exploring an environment unknown with a team of robots. As in the exploration of single robots, the goal is to minimize the overall exploration time. The key problem to solve in the context of multiple robots is that of choose the appropriate destination points for the individual robots so that can explore different regions of the environment simultaneously.  
**software:** Matlab, mex, C++,  $\LaTeX$  🔒
- 5/2017–8/2017 **University of Trento** Trento, Italy  
*Helicopter's tail-boom and rotor vibration analysis*  
This work performed during the master course of Modelling and Design with Finite Elements, for the part about the course project. The purpose is to present a consistent finite-element formulation, developed to predict the free vibration characteristics of two different helicopters tail-boom structures.  
**software:** Ansys Mechanical (APDL),  $\LaTeX$  🔒
- 2/2015–6/2015 **DIISM, Marche Polytechnic University** Ancona, Italy  
*Intership*  
In the field of machine design developed a thesis during which it has developed the ability to set and solve problems through the FEM simulations.  
**software:** Ansys Mechanical, Altair HyperMesh, LsDyna, Qt,  $\LaTeX$  🔒

## skills

### OS

MacOS, Linux, Windows

### Software

Microsoft Office, iLife

### Other

Internet networking, Arduino, Raspberry Pi

### Package

Matlab & Simulink, Maple, Ansys, SolidWorks, HyperWorks

### Programming

C++, C, Qt, Python, Ruby, R,  $\text{\LaTeX}$

## certification

2015

**Council of Europe Level B1 (PET)**

Cambridge English, University of Cambridge

## driver's license B