



## Iacopo Catalani

DATE OF BIRTH:  
18/08/1991

### Contact informations:

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## PROFILE

- ❑ **Current occupation:**
  - Industrial Engineering PhD student at Università degli Studi di Firenze.
- ❑ **Experienced in:**
  - Advanced CAD modeling;
  - Thermo-structural numerical analysis of composite structures;
  - Computational Fluid Dynamics (CFD) and thermo-structural numerical analysis of turbochargers;
  - MATLAB/Simulink 0D/1D heat-transfer modeling;
  - Hardware-in-the-loop (HIL) simulation techniques.

## SKILLS

- ❑ Proficient in spoken and written English.
- ❑ Teamwork, Adaptability, Problem solving, Thoroughness and attention to detail.
- ❑ Windows environment, Microsoft Office, CAD modeling (SolidWorks, ANSYS DesignModeler), ANSYS Mechanical simulation framework, MATLAB/Simulink, NI VeriStand.

## WORK EXPERIENCE

- ❑ **PhD candidate, Industrial Engineering, Università degli Studi di Firenze**
  - November 2019 - Now
- ❑ **Assistant Research Engineer, PIN Polo Universitario Città di Prato**
  - June 2019 - October 2019

## EDUCATION

- ❑ **Master of Science, Energy Engineering (110/110 with honors)**
  - Università degli Studi di Firenze
- ❑ **Bachelor's Degree, Mechanical Engineering (95/110)**
  - Università degli Studi di Firenze
- ❑ **High-School Diploma, Scientific Studies (90/100)**
  - Liceo Scientifico "F. Redi" Arezzo

## PUBLICATIONS

- ❑ *Assessment of a Computationally Efficient Method for Industrial Simulations of Transient Heat Transfer During Autoclave Curing* (<https://doi.org/10.1115/1.4052119>)
  - ASME Journal of Pressure Vessel Technology
- ❑ *Aerodynamic Optimization of a Turbocharger Unit Based on the Overall Efficiency Enhancement of an Internal Combustion Engine for Stationary Power Production* (<https://doi.org/10.1115/GT2021-58843>)
  - ASME Turbo Expo 2021