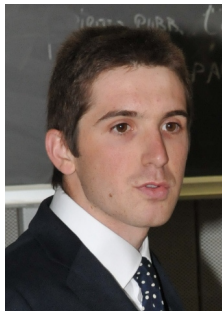


## PERSONAL INFORMATION



## Riccardo Rubini

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✉ [riccardo.rubini@vki.ac.be](mailto:riccardo.rubini@vki.ac.be)

Gender Male | Date of birth 17-01-1993 | Nationality Italian

## EDUCATION AND TRAINING

### Sept 2016 – Jun 2017 Research Master Program

Institution von Karman Institute – Brussels

Research Project subject Numerical study and modelling of the effect of the gas to wall temperature ratio on the bypass transition in an HPT nozzle guide vane

- Skills developed
- Numerical modelling of physical phenomena, computational fluid dynamics, python programming, parallel computing on cluster;
  - Numerical techniques applied to fluid dynamics FD,FEM,FV;
  - Working with LINUX operating system, shell scripting;
  - OpenFOAM programming;
  - Teamwork efficiency and ability to complete high-quality work on schedule;
  - Fully English working proficiency.

### Sept 2014 – Sept 2016 Master Degree in Aeronautical Engineering 110/110

Institution Polytechnic school of Genoa – Genova

Thesis subject Developing and validation of a Navier-Stokes axisymmetric throughflow for the analysis of axial turbomachinery. Developing of physical model and numerical implementation in NUMECA FINE Open with Openlabs

- Skills developed
- Mathematical and numerical methods for mechanical engineering;
  - Advanced applied thermodynamics and heat transfer;
  - Compressible and Incompressible Aerodynamics;
  - Structural mechanics FEM;
  - Combustion;
  - Aeroacoustics.

### Nov 2015 – April 2016 Short Training Program

Institution von Karman Institute – Brussels

Thesis subject Developing and validation of a Navier-Stokes based axisymmetric throughflow for the analysis of axial turbomachinery in NUMECA Openlabs environment

- Skills developed
- Simplified analysis tools for turbomachinery; developing of physical model and numerical implementation;
  - Computational Techniques for Fluid Dynamics applied to turbomachinery;
  - LINUX operating system and shell scripting.

### Sept 2011 – Oct 2014 Bachelor Degree in Mechanical Engineering with honors

Institution Polytechnic School of Genoa – Genova

Thesis subject Evaluation of OpenFOAM capabilities applied to the heat transfer in liquid metals

- Skills developed**
- General Mathematics and Physics;
  - Maxwell theory;
  - Chemistry;
  - Fundamentals of electrical engineering;
  - Thermodynamics and heat transfer;
  - Solid and structural mechanics.

## PERSONAL SKILLS

**Mother tongue** Italian

Other languages	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
French	A2	A2	A1	A1	A1

- Social skills**
- Accustomed to teamwork; I practiced competitive sport activities in international cycling teams from the age of 7 to 20;
  - I developed my aptitude to international teamwork and collaboration with my fellow colleagues during my last working experience at von Karman Institute;

- Computer skills**
- Programming languages:
    - Basic: Fortran 90;
    - Intermediate: C++, Python, Shell scripting Matlab/Octave, Latex.
  - Operating systems:
    - Basic: Windows Desktop, Office Suite, Open Office;
    - Intermediate: Linux Ubuntu, Fedora and Arch distributions.
  - Computational software:
    - Basic: Ansys FEM, Ansys Fluent;
    - Intermediate: Numeca, OpenFOAM, SU2.

- Other skills**
- Very interested in modern particle physics such as experimental verification of standard model and Higgs mechanism (favourite divulgative books: Richard Feynman, Brian Green and Lisa Randall);
  - I had also pleasure to participate in conferences and meetings dealing with new theories that suggest to extend the standard model: supersymmetry, LQG and string theory.

- Artistic skills**
- I studied piano and I have basic knowledge of music theory.

- Sport skills**
- I practiced cycling at competitive level from the age of 7 to 20 participating to national and international competitions;
  - Currently affiliated to the Italian Federation of Triathlon (FITRI) and Italian Federation of Track and Field (FIDAL);
  - Winter sports (freeride and cross country skiing) and mountain lover.