europass

Vittorio Ravaglioli

Date of birth: 21/07/1983 | **Nationality:** Italian | **Email address:**

vittorio.ravaglioli2@unibo.it

WORK EXPERIENCE

05/09/2022 – CURRENT Forli, Italy

ASSOCIATE PROFESSOR UNIVERSITY OF BOLOGNA

■ Lecturer in:
□ Internal Combustion Engines
(International Master Degree in "*Advanced Automotive Engineering*");
□ Turbomachineries
(*Aerospace engineering*)

■ Management of the research activities performed in the test cells at the University of Bologna, aimed at testing, analysing and controlling Low Temperature Combustions, especially RCCI and GCI (collaboration with Marelli - Powertrain Division).

■ Responsible of a 8-year collaboration with Ferrari Gestione Sportiva (F1 Dept.) aimed at the development of optimal engine control strategies and tools for the analysis of engine performance.

■ Member of the *Quality Assurance Committee* for the international Master Degree in "*Advanced Automotive Engineering*";

■ Author of technical papers, conference organizer and reviewer:
□ Organizer and Reviewer for ASME ICEF Conferences;
□ Reviewer for Journals and Conferences organized by the ASME ICE Division;

Reviewer for several Journals from SAE, Elsevier and MDPI.

Address via Montaspro 97, 47121, Forli, Italy

03/09/2019 – 04/09/2022

SENIOR ASSISTANT PROFESSOR UNIVERSITY OF BOLOGNA

03/05/2016 – 31/08/2019

JUNIOR ASSISTANT PROFESSOR UNIVERSITY OF BOLOGNA

SENIOR SW DEVELOPMENT ENGINEER, ENGINE CONTROL SYSTEMS SPECIALIST ALMA AUTOMOTIVE - RESIDENT IN FERRARI GESTIONE SPORTIVA

2014 - April 2016

■ Design and implementation of combustion control strategies.
■ Development and improvement of engine diagnostics

UNIVERSITY RESEARCH ASSISTANT UNIVERSITY OF BOLOGNA

2012-2013

- Collaboration with Magneti Marelli Powertrain - Development of remote combustion sensing methodologies for the on-board, real-time estimation of cylinder pressure and center of combustion in internal combustion engines.
- 2012 – Collaboration to the SIER project: Powertrain model development and validation aimed at the dynamic simulation of a hybrid vehicle (in collaboration with "Lamborghini" and "Landi Renzo").

EDUCATION AND TRAINING

01/11/2009 – 31/10/2011 Bologna, Italy

DOCTOR OF PHILOSOPHY (PHD) University of Bologna

15/09/2002 – 12/12/2007 Bologna, Italy

MASTER'S DEGREE IN MECHANICAL ENGINEERING University of Bologna

Energy conversion, Mathematical methods in engineering, Fluid mechanics, Machine applied mechanics, Advanced thermo-fluid dynamics, Thermo-technical systems, Mechanical systems, Machines, Applied chemistry technology, Principles and Methods of Mechanical Design, Internal combustion engines, Control of internal combustion engines, Dynamics of Machines and Mechanical Systems, Industrial logistics

Final grade 110/110 cum Laude

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	C1	C1	C1
SPANISH	B2	B2	B1	B1	A2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Microsoft Office | Microsoft Word | Microsoft Excel | Matlab/Simulik | Solidworks software | Microsoft Powerpoint | Outlook | National Instruments

ADDITIONAL INFORMATION

PATENTS

Method to Control a Supercharged Internal Combustion Engine Provided with a Turbocharger by Means of an Estimation of the Average Power Delivered by the Turbine of the Turbocharger

European patent EP2930337 A1 - Date of publication: 14.10.2015

Method of Estimating the MFB50 Combustion Index and the Instantaneous Torque Generated by the Cylinders of an Internal Combustion Engine

European patent EP3171006 A1 - Date of publication: 24.05.2017

Method to Control the Combustion Noise Generated by a Spontaneously-Started Internal Combustion Engine

European patent EP3222839 A1 - Date of publication: 27.09.2017

HONOURS AND AWARDS

2020 ASME ICE Fall Technical Conference – ASME - American Society of Mechanical Engineers Most valuable Technical Paper in Track 5 – Powertrain Technologies and Control
Ravaglioli, V., Ponti, F., and De Cesare, M., “Investigation of Gasoline Compression Ignition for Combustion Control”.

NETWORKS AND MEMBERSHIPS

ASME - American Society of Mechanical Engineers ASME Member since 2012

ASME Journal of Energy Resources Technology (JERT) Associate Editor