

GIORGIO MANCINI

CONTACT INFORMATION

Telephone **+44 7532 793283**
E-mail **giorgio.mancini2@gmail.com**
LinkedIn **<https://it.linkedin.com/in/mancinigiorgio>**

PROFESSIONAL PROFILE

- 10 years of Research and Industry experience in Powertrain Controls and Testing
- Advanced technical knowledge and academic background with PhD in Modelling and Control of ICE systems
- Confident engineer with customer facing experience and strong communication skills
- Expert in Rapid Control Prototyping systems development
- Author and co-author of 14 publications in research journals with presentations at international conferences
- Executive Master's degree in Technology and Innovation Management with experience of leading and planning complex projects, managing teams and stakeholder management
- Founder of Bologna University's Formula Student Team and Powertrain Team Leader for two racing seasons
- Sociable and open person, highly motivated, ambitious and determined, deadline oriented, challenge driven and passionate about innovation and new technology

WORK EXPERIENCE

- June 2018 - Present **MANAGER – POWERTRAIN CONTROLS**
 Aston Martin Lagonda
Responsibilities:
- Hybrid Supervisory Control, full V-cycle development
 - Definition of software development process from system requirements capture to validation across all powertrain programmes
 - Hardware-In-the-Loop and Powertrain Labcar development
 - In-house software prototyping via on-target functional bypass
 - Functional safety ISO26262 for Powertrain
 - Team management with direct reports
- Apr 2017 – May 2018 **LEAD ENGINEER – POWERTRAIN RESEARCH CALIBRATION AND CONTROLS**
 Jaguar Land Rover
- Project and technical lead of engine control prototyping systems to support Powertrain Research projects
 - Responsible for software requirement definition, validation and calibration on engine dyno and vehicle
 - Mentoring and technical development of graduate engineers in the team, completed a 5 day professional mentorship programme
- Nov 2016 – Mar 2017 **ENGINE CONTROL SYSTEMS RESIDENT ENGINEER AT JLR**
 Bosch Engineering
- Engineering support for software deliveries, calibration and general troubleshooting
 - Customer facing role, communication interface between customer and Bosch headquarters

| | |
|-------------------------------|--|
| Jan 2015 – Oct 2016 | ENGINE CONTROL SYSTEMS ENGINEER AND BUSINESS DEVELOPMENT MANAGER Alma Automotive <ul style="list-style-type: none"> • Delivery of automated calibration tools for Maserati/Alfa Romeo engine programmes • Delivery of full prototyping Engine Management System for Ducati Motor advanced engines programme • Mentoring of graduate engineers • Promoting company products and services to potential new customers in Europe • Organisation and participation at international trade shows • Gathering, collating and linking powertrain technology trends information • Product requirement definition (quality function deployment) |
| Jan – Dec 2014 | POSTDOCTORAL RESEARCH FELLOW University of Bologna, DIN Department of Industrial Engineering <ul style="list-style-type: none"> • Acoustic emission processing for Turbocharged GDI engine control applications • Knock damage mechanisms in turbocharged spark-ignition engines |
| Apr 2010 – Dec 2013 | RESEARCH AND TECHNICAL CONSULTING University of Bologna, DIN Department of Industrial Engineering <ul style="list-style-type: none"> • Author and co-author of 14 publications in international journals (most publications available on Research Gate) • Modelling and control of direct injection internal combustion engines • Combustion control and calibration: development of methodologies for the calibration of gasoline engine control parameters • Thermal management strategies for SCR after treatment systems • Base calibration of a small turbocharged gasoline engine • Dynamic optimisation, transient operation and control of diesel engines |
| Sep 2008 – Sep 2012 | FOUNDER AND POWERTRAIN LEADER Unibo Motorsport, Formula Student Team University of Bologna <ul style="list-style-type: none"> • Design of the entire engine control system in LabVIEW from scratch, implementation of traction and launch control system, fast gear shift system • Full engine calibration both on test bench and on vehicle • Award for 'Most innovative use of an embedded system in the car' by National Instruments UK |
| EDUCATION AND TRAINING | |
| Dec 2014 – Nov 2015 | EXECUTIVE MASTER'S DEGREE IN TECHNOLOGY AND INNOVATION MANAGEMENT Bologna Business School (BBS) <ul style="list-style-type: none"> • Comprehensive course structure focusing on a broad range of business management subjects, specialising in technology and innovation management • Courses: strategic cost management, creativity and leadership, entrepreneurship and business plan, innovation management, people management, project management, operations, marketing, strategy & technology, sustainable innovation |
| Jan 2011 – Dec 2013 | PhD IN MECHANICAL ENGINEERING AND ADVANCED ENGINEERING SCIENCES University of Bologna – Faculty of Engineering <ul style="list-style-type: none"> • PhD Thesis: <u><i>Automotive Diesel engine transient operation: modelling, optimization and control.</i></u> Tutor: Prof. Nicolo' Cavina • Research projects in collaboration with Industry partners, OEMs and Tier-1 suppliers • Development of control strategies for internal combustion engines through Rapid Control Prototyping systems • Experimental activity on internal combustion engines on test bench • Assistant lecturer in "Experimentation and calibration of internal combustion engines" |
| Jan – Dec 2013 | PhD PERIOD ABROAD (1 YEAR) ETH Zurich, Institute for Dynamic Systems and Control (Professor Lino Guzzella) <ul style="list-style-type: none"> • Tutors: Prof. Lino Guzzella and Dr. Chris Onder • Research project: model-based calibration of turbocharged diesel engines |

- 2 publications as main author and 1 as co-author
- Study and application of optimal control theory

Oct 2007 – Mar 2010

MASTER'S DEGREE IN MECHANICAL ENGINEERING

University of Bologna – Faculty of Engineering

Curriculum of modelling and control of internal combustion engine systems

- Score achieved: **110/110 cum laude**
- **Master's Thesis:** *Engine control system development for the Formula SAE car*–
Awarded as 'Best Automotive Thesis in Italy' (2009/2010) by SAE-NA

Sep 2004 – Oct 2007

BACHELOR'S DEGREE IN MECHANICAL ENGINEERING

University of Bologna – Faculty of Engineering

- Score achieved: **110/110 cum laude**
- **Bachelor's Thesis:** *Spray models evaluation through OpenFOAM*

PERSONAL SKILLS AND COMPETENCES

LANGUAGES

ENGLISH – Fluent; **ITALIAN** – Mother tongue; **GERMAN** – Elementary

TECHNICAL SKILLS

- Experience in powertrain control systems, engine testing and calibration on test bench
- Highly experienced in the engine test bed environment and combustion measurement systems
- Manual skills in assembling and disassembling mechanical parts of engines
- Expert in data acquisition systems and rapid control prototyping systems
- Strong knowledge of automotive electrical and electronic systems
- Excellent proficiency with computers and web. Excellent knowledge of Microsoft Project, LabVIEW, VeriStand, Matlab, Simulink, ETAS tools and softwares

ORGANISATIONAL SKILLS AND COMPETENCES

- Lecturer (2010-2014) in "Specialization courses in engine control and calibration" for automotive engineers and in the Master's course "Experimentation and calibration of internal combustion engines"
- Oral presentation of research papers at several international conferences
- Secretary of SAE Collegiate Chapter of University of Bologna (2008-2010), over 100 members, organization of conferences in collaboration with automotive companies
- Teamwork, leadership and project management skills developed throughout academic and professional career
- Ability to work well under pressure, deadline oriented with attention to detail

AWARDS

- Award Winner: "**Best Master's thesis in automotive**" 2009/2010 sponsored by SAE-NA.
- Award Winner: "**Most innovative use of an embedded system in the car**" sponsored by National Instruments UK in conjunction with the Formula Student competition (Silverstone).

PERSONAL INTERESTS

- Professional Tennis instructor
- Skiing, Golf, Cycling, Gym
- Spending time with my family

DRIVING LICENCE

European driving licence: A, B.

Advanced driver training permit holder at Aston Martin Lagonda