

## Serghei Massari

CONTACT

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## **WORK EXPERIENCE**

### **Jaguar Land Rover (NetComGroup Contractor)**

**January 2017 - March 2018** 

Powertrain HiL Engineer

PowerTrain Hardware in the Loop engineer for MHEV, PHEV, BEV applications.

### Technical skills aquired:

- Capability to manage many different projects at the same time.
- Developing Simulink models for MHEV, PHEV, BEV vehicles:
- 1. Plant (ICE engine, Electric Motor, High Voltage Power Supply, DCDC Converter, Inverter);
- 2. I/O (sensors & actuators)
- 3. Networks (CAN FlexRay, Lin)
- 4. SoftECUs (all the ECU to be simulated, if there are)
- Setting up connections between the Simulator and the ECUs (I/O channels pinout and wiring harness);
- Managing CAN, FlexRay, LIN networks and RS232 protocol;
- Providing support to the PHEV Test Cells (Full Hybrid Propulsion and Emission cells);
- Analysing and correct Data Trouble Codes within the ECUs;

### Software:

- ConfigurationDesk (dSPACE)
- ControlDesk (dSPACE)
- AutomationDesk (dSPACE)
- CANAlyzer
- Simulink (Matlab)
- INCA
- FlexRay tool

#### Hardware:

- Simulators (dSPACE): PHS full size, SCALEXIO rack
- CAN/FlexRay Monitoring: Vector Box (CANAlyzer), ETAS Box (INCA)

### Personal Skills Aquired:

- Knowledge of automotive technology and product development;
- Automotive powertrain & electrification control experience.
- Strong understanding of attributes interaction and system engineering on Powertrain Performance.
- Proven capability of working across multiple PT disciplines in a rapidly changing environment with conflicting demands across a wide range of commodities.
- Experience working with Bosch engine management systems.
- Excellent problem-solving skills;

- Exceptional team-working, intercultural and interpersonal skills;
- Competent Project Management skills;
- The ability to communicate and present effectively at all levels.
- Tenacity, resilience and focus.

Netcom Group S.p.A. 1/06/2016 - 31/12/2016

Automotive Validation Engineer (Test Engineering, HIL Simulation)

Validation Hardware in the Loop, working with dSpace's SCALEXIO and Midsize simulators on both engine, diesel and gasoline. Activities:

- Configuration and wiring harness for dSPACE's SCALEXIO and Midsize simulators.
- ECU Testing through Hardware-in-the-loop simulation.
- Automating Tests.
- ECU Calibration and Diagnostic.
- Model based Control Design.
- Web-based test management system.
- Software quality assurance.

Jaguar Land Rover 12/07/2016 - 14/08/2016

Consultant Engineer (Test Engineering, HIL Simulation) at Jaguar Land Rover

One Month training at Jaguar Land Rover in Coventry, UK.

- ECU Validation Hardware in the Loop for BEV, MHEV, PHEV, Diesel and Gasoline vehicle,
- SCALEXIO and Midsize dSPACE Simulators.
- Open Loop Test on simulators (phisical and engineering)
- Engine models standardization (Simulink) among different vehicle's types
- C-CAN and Flexray message counter algorithms and checksum.

A.Abete srl 1/06/2015 - 24/12/2015

R&D Project Engineer

Internship working in the Automotive, specifically on variable gerotor oil pump for low cylindrate cars and in the aeronautical field designing and producing aircraft's windshilds in carbon fiber.

- CAD
- SIMULATION
- FEM ANALYSIS
- PROTOTYPING
- TESTING
- MEASUREMENT ANALYSIS
- EXPERIENCE WITH VARIOUS MANUFACTURING PROCESSES;

A.Abete srl 1/10/2014 - 31/05/2015

**R&D Project Engineer** 

6-months Master's thesis working on an electromechanical actuator for the industrial field, plus 6-months apprenticeship working on design and simulation of a magneto-rheoligical joint and an high-performance solenoid valve for the Automotive.

- CAD
- SIMULATION
- CONTROL TECHINCS (PID)

- FEM ANALYSIS
- PROTOTYPING
- TESTING
- MEASUREMENT ANALYSIS

## **EDUCATION**

# MSc first class honours degree in Mechanical Engineering with specialization in design & production

08/01/2013 - 29/05/2015

Federico II University of Naples

During the master degree I have focused my attention on the automotive field with an accent on electrical vehicles

### **BSc degree in Mechanical Engineering**

01/10/2008 - 19/12/2012

Federico II University of Naples

## SOFTWARE

CAD: SolidWorks, Catia (Mechanical Design & Shapes)

■ FEM: Ansys

■ Simulation: AMESim

■ MathWorks: Matlab/Simulink

dSpace's softwares: ControlDesk, ConfigurationDesk, AutomationDesk
Validation HIL: DIAnalyzer (FCA Group), CANAlyzer (Vector), INCA (ETAS)

Office Pack

■ Management: Testlink (web-based test management system)

## **LANGUAGES**

ITALIAN: Mother tongueENGLISH: C1 IELTSFRENCH: Basic

## **QUALIFICATIONS**

SPANISH: Basic

- **DIVING**: Open water diver, Deep Diver, Enriched Air Diver licenses. This activity gave a fundamental capacity, necessary to survive in this jungle that we use to call life: self control. In this discipline it's necessary to breath as slowly as possible in order to slow down the hearth rate, hence save as much oxygen as possible. So, whatever happens, you need to stay calm and relax and face any problem with serenity, trying to avoid to be caught by anxiety or stress.
- **DRIVING**: Safety Driving License. Thanks to this course, I learned to control and safely drive powerful vehicles with all road conditions. I did it because I love to drive and everything that concerns road and race cars.

# REFERENCES

- Mario Marchetti, R&D Manager at A.Abete srl; mario.marchetti@abete.net
- Salvatore Pirozzi, Business Manager at Media Motive srl; s.pirozzi@netcomgroup.eu
- Bruno D'Angelo, Project Manager at Media Motive srl; b.dangelo@netcomgroup.eu
- Giuseppe Selva, Project Manager at Media Motive srl; g.selva@netcomgroup.eu
- Francesco Fornari, PT HiL Technical Stream Lead at Jaguar Land Rover Ltd; ffornari@jaguarlandrover.com

## **INTERESTS**

### HOBBIES:

- 1. MUSIC: I love every kind of music from the classical to the heavy metal, because there's is something beautiful in each one of them. I play guitar and piano since I was a child;
- 2. DRAWING: I like drawing, especially cars because of my love for four wheels. Moreover, during the weekend I use to work a bit on my car by my own, changing old components with newer ones.
- 3. READING: what I said about the music, is true for the reading as well. I like to read many different kind of books, historical novel, fantasy novel and crime novel.
- **SPORTS:** I practiced many sports because of my love for health and body wellness: swimming, cliff diving, sailing, tennis, basketball, volleyball, football, diving, skiing.
- **TECHNOLOGIES**: i like to read engineering online newspaper (Theengineer.co.uk) for news about the latest technologies in all engineering fields. Besides I follow many different technological information channels on Facebook and Youtube.



I'm a guy with multiform talent and I have interest in all fields of technology. I would like to work with leading companies in the world to come into contact with the latest technologies and then to be able to improve my skills with the aim of taking part in this world's changing. I care about my planet and I would like to be a small piece of the puzzle to improve the lives of all who live in.

Furthermore, as a child I loved with all my might the world of cars. I dreamed of becoming a pilot but for my parents, a doctor and a teacher of history, those were just whims of children. So I embarked on the "book's road" and I obtained a Master of Science in Mechanical Engineer with the hope to have the chance to work for the biggest brands in the automotive. Now I'm ready to put into practice what I have been learned in recent years of university, so finally I can fulfill my dream, that many envy, to go to work with a smile.