



Nicola Fontana

Curriculum Vitae

"A quiet sea never made good sailors"

Education

- 2014–2016 **Masters Degree**, *Technical University of Munich*, Applied and Engineering Physics
Final Note 1.4.
- 2009–2013 **Bachelor Degree**, *Università degli studi di Trieste*, Physics
Final Note 94/110.
- 2003–2008 **Secondary Schooling Degree**, *Liceo Scientifico Polo Val Boite (Cortina D'Ampezzo)*, Scientific secondary school
Final Note 89/100.

Masters Thesis

- Title *Fluid Structure Interaction: Benchmarking and non Newtonian Fluids Simulations.*
- Supervisors Prof. Martin Zacharias & Prof. Boris Vexler.
- Description The goal of the thesis was to develop a robust code to simulate Fluid-Structure-Interaction problems. The developed code was tested on a well known benchmark to ensure correctness and robustness. As second step I modified the code to simulate non-newtonian fluid flows and investigated the numerical challenges posed by this type of simulations.

Bachelor Thesis

- Title *Examples of efficiency measurements with the "Tag and Probe" method.*
- Supervisors Prof. Giuseppe Della Ricca & Dr. Andrea Schizzi.
- Description In the thesis I tested the "Tag and Probe" method as particle selection algorithm in high energy accelerators. In the specific case the accelerator was the LHC at Cern in Geneva.

Experience

- Present **Software Development Engineer**, *CARIAD SE*, Ingolstadt
Development of .NET Framework C# libraries and tests.
- 2019-2021 **Senior Test and Development Engineer**, *in-tech GmbH*, Ingolstadt
Development of framework tools for test automations, test and development in different projects. Consultant for project management on the evaluation of possible new Projects.
- 2017-2019 **Junior Test and Development Engineer, Team Coordinator Ethernet Testing**, *in-tech GmbH*, Ingolstadt
Coordination of the Ethernet Testing team, test and development of test automations for automotive ECUs over different BUS systems (Ethernet BroadR-Reach, FlexRay, CAN, CAN-FD, 1000-BASE). Specific focus on the framework development to create tools to improve the level of automation of the tests.
- 2010-2011 **Professional Athlete: Alpine Skiing**, *Ski Club: Unione Sportiva Val Padola*
Training and racing around the world, during summer season one month training camp in Saas Fee and Zermatt (Switzerland), before ski season start one month training camp in Nakiska and Norquay (Alberta, Canada), during ski season races in Italy, Austria and Canada.

Awards

- 2009 Italian Alpine Ski Title in Giant Slalom at the Italian Citizens Championships.

Certificates

- 2021 SAFe 5.1: Certified Agilist.
- 2019 CTAL Certified Tester Advanced Level Test Manager.
- 2018 Audi prototype drivers license.
- 2018 CTFL Certified Tester Foundation Level.
- 2016 Attended *deal.ii users and developers* training at ICTP in Trieste (18-25/03/2016).
- 2016 Attended *International Symposium and Winter School FSI 2016* at RICAM in Linz (11-15/01/2016).
- 2013 TOEFL IBT.

Programming Languages and Software Skills

- Basic PYTHON, HTML, CSS, JavaScript, ASPNetCore.
- Intermediate C, C++, Fortran, L^AT_EX, Microsoft Office, EXAM, ControlDesk, SVN, JIRA, Bitbucket, CMake.
- Advanced C#, Linux, Microsoft Windows, Mac OS, Git, CANoe, CAPL, Visual Studio, Visual Studio Code, VTestStudio, ODIS.

Communication Skills

- 2016 Oral Presentation at Technical University of Munich of my master thesis.

- 2016 Oral Presentation of master thesis results at Confernece on *Simulation and Optimization of Extreme Fluids* in Heidelberg.
- 2016 Oral Presentation of master thesis results at *International Symposium and Winter School FSI 2016* at RICAM in Linz.
- 2015 Oral Presentation at Technical University of Munich of my Proseminar on *Dynamics of Sand Dunes Formation* at the Physics department.
- 2013 Oral Presentation at Università degli studi di Trieste of my bachelor thesis.

Languages

Italian Mothertongue
 German Fluent
 English Fluent
 Swedish Basic

A1 Certificate

Interests

- Skiing: Professional skier until 2009
- Soccer: Former forward player
- Running
- Photography
- Formula-1
- Tennis
- Roadbike
- Reading