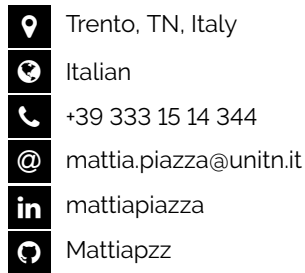


MATTIA PIAZZA

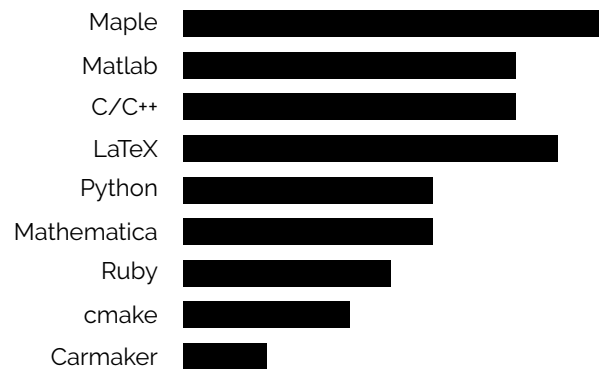
Researcher
Mechatronics Engineer



WHO AM I?

I am a passionate, pragmatic and goal-driven mechatronics engineer always looking for personal growth opportunities and challenges. This guided my academic choices and allowed me to approach the world of autonomous driving. To pursue my passion, I became a University researcher and I had the opportunity to work on optimal control problems and algorithms development for ADAS. I collaborated with partners from the automotive and the motorsport industry. My multidisciplinary education, combined with my interest in practical applications, allows me to address both theoretical and technical aspects of engineering problems. In my work and life, I am always curious, ambitious, open-minded and determined to succeed.

SOFTWARE AND PROGRAMMING SKILLS



WORKING EXPERIENCES

2021–Oct. 2022	Research Fellowship (Research grant decree n. 205/2020) Title: "Solution algorithms comparison for minimum-time optimal control problems for racing vehicles" Supervisor: Prof. Francesco Biral.	University of Trento
Jun.–Nov.2020	Research scholarship (Decree n. 74/2020) Title: "Minimum Time Manoeuvres of complex vehicle models described with DAE". Supervisor: Prof. Francesco Biral.	University of Trento
Jun.–Sept. 2017 Internship	Internship in Quality Control department Precision measurements of mechanical components, development of sequential charts, specific control plans (SPC), CCP, measurements for capability analysis (Cp, Cpk, etc.).	SIAP s.p.a. gruppo CARRARO
Jun.–Sept. 2013 & Jun.–Sept. 2012	Plumber apprentice Plumber apprentice during summer season. Even if this job seems unrelated to my current career goals, it was a fundamental experience for my personal growth.	DE NARDO ALESSANDRO IMPIANTI TERMIDRAULICI

TEACHING EXPERIENCES

2022–Present	Tutoring and mentoring of thesis students Tutoring, managing and mentoring of multiple students during their research thesis with Prof. Francesco Biral.	University of Trento
2022–Present	Teaching assistant Teaching assistant for courses of "Sistemi Meccanici e Modelli" e "Fondamenti di Meccanica" In collaboration with Prof. Mauro Da Lio.	University of Trento
2021–2022	Teaching assistant Teaching assistant for courses of "Sistemi Meccanici e Modelli" e "Fondamenti di Meccanica" In collaboration with Prof. Mauro Da Lio and Prof. Emiliano Rustighi.	University of Trento
Apr. – Jun. 2019 & Sept.–Dec. 2019 & Sept.–Dec. 2018	Tutorship specific areas for mechanics and mechatronics and Video-lectures Frontal lecturer and video lecture (UNITN DII Youtube channel) in English for MSc in Mechatronics Engineering students. Supervisors: Professors F. Biral, E. Bertolazzi, D. Fontanelli and D. Bortoluzzi	University of Trento

PROJECTS WORKING ON

Gen. 2021-Present	Minimum Lap Time Simulator In collaboration with Aprilia Racing team we develop algorithms to solve optimal control problem for minimum lap time purposes on a complete motorcycle dynamic model. This work is a direct spin-off of my master thesis.	APRILIA RACING & University of Trento
Apr. 2022-Present	VeDi 2025 Collaboration with CRF (<i>Fiat Research Centre</i>) within the european project VeDi 2025. Our contribute is the development of algorithms to plan and negotiate manoeuvres for autonomous vehicles equipped with ADAS systems.	CRF & University of Trento
May. 2022-Present	Automatic generation of racetracks for vehicle simulators Collaboration with AnteMotion to develop a toolchain for automatic generation of racetracks and scenarios for vehicle simulators.	AnteMotion & University of Trento

EDUCATION

2022 – Present	PhD student in Materials, Mechatronics and Systems Engineering Doctoral program Materials, Mechatronics and Systems Engineering	University of Trento
2020	Professional qualification to practice as an engineer Industrial Engineer	University of Trento
2017 – 2020	Master of Science degree in Mechatronics Engineering Curriculum mechanics e mechatronics in English. With particular focus on simulation, robotics and controls.	University of Trento
2013 – 2017	Bachelor of Science degree in Mechanical Engineering BSs in mechanical engineering with focus on turbo machinery and mechanical design.	University of Udine
2008 – 2013	Scientific High school diploma High school diploma with curriculum PNI (National Informatics Plan).	Liceo Scientifico "Michelangelo Grigoletti"

LANGUAGES

Italian - Native
English - Fluent (C1 level)

HOBBIES AND SPORTS

I am passionate about both technology and nature. I like to build and program small automated projects and love to spend time in the mountains hiking, climbing or skiing. I am an amateur climber and alpinist. I also enjoy long hikes, *Via Ferrata* and trail running. During winter, I practice both alpine ski and ski touring.

PRIVACY

In compliance with the Italian Legislative Decree no. 196 dated 30/06/2003, I hereby authorize the recipient of this document to use and process my personal details for the purpose of recruiting and selecting staff and I confirm to be informed of my rights in accordance to art. 7 of the above-mentioned decree.

Trento, 26th January 2023

