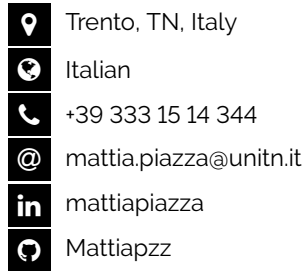


MATTIA PIAZZA

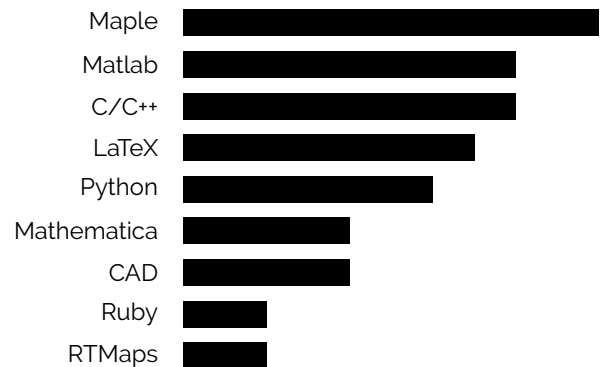
Researcher
Mechatronics Engineer



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

Sept. 2021-Present	Teaching assistant	University of Trento
	Teaching assistant for courses of <i>"Sistemi Meccanici e Modelli"</i> e <i>"Fondamenti di Meccanica"</i> In collaboration with Prof. Mauro Da Lio and Prof. Emiliano Rustighi.	
Gen. 2021-Present	Research grant (Decree n. 205/2020)	Università di Trento
	Title: "Solution algorithms comparison for minimum-time optimal control problems for racing vehicles" Supervisor: Prof. Francesco Biral.	
Jun.-Nov.2020	Research scholarship (Decree n. 74/2020)	University of Trento
	Title: "Minimum Time Manoeuvres of complex vehicle models described with DAE". Supervisor: Prof. Francesco Biral.	
Apr. – Jun. 2019 & Sept.–Dec. 2019 & Sept.–Dec. 2018	Tutorship specific areas for mechanics and mechatronics and Video-lectures	University of Trento
	Frontal lecturer, notes, exercises and video lecture in English for freshmen students of the MSc in Mechatronics Engineering. The videos are available on the Youtube channel of the DII. Supervisors: Prof. F. Biral, Prof. E. Bertolazzi, Prof. D. Fontanelli, Prof. D. Bortoluzzi	
Jun.–Sept. 2017 Internship	Internship in Quality Control department	SIAP s.p.a. gruppo CARRARO
	Precision measurements of mechanical components, development of sequential charts, specific control plans (SPC), CCP, measurements for capability analysis (Cp, Cpk, etc.).	

PROJECTS INVOLVED IN

Gen. 2021-Present	Minimum Lap Time Simulator	APRILIA RACING & University of Trento
	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.	
Apr. 2022-Present	VeDi 2025	CRF & University of Trento
	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.	
May. 2022-Present	Automatic generation of racetracks for vehicle simulators	AnteMotion & University of Trento
	Collaboration with AnteMotion to develop a toolchain for automatic generation of racetracks and scenarios for vehicle simulators.	

EDUCATION

Dec. 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. MSc offered entirely in English. Main courses: modeling and simulation of mechatronics systems, dynamic and control of vehicles and robots, automatic control, industrial robotics.	University of Trento
2013 – 2017	Bachelor of Science degree in Mechanical Engineering Main courses: thermodynamics and heat transmission, applied mechanics, fluid-dynamics, turbomachinery, mechanics of solids and mechanical design, mechanical technology.	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 (IELTS)

HOBBIES

It might sound oxymoronic, but I am passionate about technology and nature. I build and program small and automated projects with microcontroller and love to spend time in the mountains.

SPORTS

I am an amateur climber and I practice both alpine ski and ski touring. I also enjoy football and mountain trail running.

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, 27th May 2022

