

# University Academic Curriculum Vitae

## Education since leaving school

- 2019, Bachelor's degree in industrial mechanical engineering, Free University of Bozen/Bolzano, grade 110/110.
- 2022, Master's degree in industrial mechanical engineering, Free University of Bozen/Bolzano, grade 110/110, cum laude.
- 2022 - ongoing, PhD in Advanced Systems Engineering, Free University of Bozen/Bolzano.

## Teaching/academic experience

From / to	Job title	Name of academic Institution	Academic level	Responsibilities
Sept. 2022 – Oct. 2022	Highschool professor	Liceo Scientifico Torricelli, Bolzano	Highschool	Professor of Mathematics and Physics
Oct. 2022 – Jul. 2025	Highschool professor	Istituto Tecnico Tecnologico Rainerum, Bolzano	Highschool	Professor of "Design of Energy Plants"
Academic Year 2023/2024	Teaching assistant	Free University of Bozen-Bolzano	University	Teaching assistant of "Thermomechanical measurements"
Academic Year 2024/2025	Teaching assistant	Free University of Bozen-Bolzano	University	Teaching assistant of "Thermomechanical measurements"
Academic Year 2025/2026	Teaching assistant	Free University of Bozen-Bolzano	University	Teaching assistant of "Thermomechanical measurements"

## Professional experience

From / to	Job title	Company name	Responsibilities
Apr. 2022 – Jul. 2022	R&D Engineer intern	Dynamic Ear Company (Delft, NL)	Products design and development
Apr. 2019 – Sept. 2019	Technical office engineer intern	Metalsistem (Rovereto, IT)	Products testing and development

## Editorial activities

- Associate editor for the Journal of Materials Science: Materials in Engineering.
- Invited reviewer for the journals: Engineering Fracture Mechanics, Forschung im Ingenieurwesen, Journal of Materials Science: Materials in Engineering, Results in Engineering, International Journal of Pavement Research and Technology.

## Awards

- AGMA FTM 2024 (Chicago, Illinois), best paper presentation for the session "Materials & Heat Treatment".
- AGMA FTM 2024 (Chicago, Illinois), third best paper presentation overall.
- VDI International Conference on Gears 2025 (Munich, Germany), best presentation award.

## Other academic responsibilities

- 3rd International Symposium on Industrial Engineering and Automation (ISIEA 2024), organizing committee.
- Co-supervisor of Bachelor & Master Theses.
- Mar.-Apr., Sept-Nov. 2024, visiting scholar at Gearlab Power Transmission Laboratory, Ohio State University, Ohio, United States.

## Participation in international projects

- COST project CA23109, "Fatigue Benchmark Repository (FABER)", participation as leader of the task group "4.2 Critical Volume Effect".

## Selected Publications

- L. Pagliari, C. Nezzi, R. Vidoni, F. Concli, (2023). An innovative architecture of a three-speed automatic internal shifting hub for regular commuting bicycles: kinematic analysis and preliminary sizing. Engineering Science and Technology, an International Journal, 48, 101587.
- R. Gandhi, L. Pagliari, R. Gerosa, F. Concli (2024). Quasi-static

	<p>and tension-compression cyclic properties of additively manufactured Ti-6Al-4V scaffold-shaped lattice architectures. Results in engineering 24 (2024): 103101.</p> <ul style="list-style-type: none"> <li>• L. Pagliari, F. Concli (2025). A review of multiaxial low cycle fatigue criteria for the life prediction of metals. International Journal of Damage Mechanics 34(3), 377-414.</li> <li>• L. Pagliari, R. Gerosa, D. Panzeri, L. Fraccaroli, F. Concli (2025). High- and Low-Cycle Fatigue Behavior of Additively Manufactured Ti6Al4V and Influence of Surface Finish. Engineering Failure Analysis, 180, 109825.</li> <li>• R. Gandhi, M. Salmi, B. Roy, L. Pauli, L. Pagliari, F. Concli (2025). Mechanical and fatigue performance of multidirectional functionally graded Ti6Al4V scaffolds produced via laser powder bed fusion for orthopedic implants. Materials and Design 251, 113725.</li> <li>• R. Gandhi, M. Salmi, B. Roy, L. Pagliari, F. Concli (2025). Mechanical performance, fatigue behaviour, and biointegration of additively manufactured architected lattices. Virtual and Physical Prototyping 20(1).</li> <li>• R. Gandhi, M. Salmi, B. Roy, L. Pagliari, F. Concli (2025). Multiaxial Fatigue Behavior of Triply Periodic Minimal Surface Lattice Structures in Ti6Al4V Fabricated by Laser Powder Bed Fusion under Combined Axial-Torsional Loading. Journal of Materials Research and Technology 38, 3655-3671.</li> <li>• L. Pagliari, I. Hong, A. Kahraman, F. Concli (2025). An Experimental Analysis of the Gear Tooth Bending Strength Predictions from ISO 6336 in Low and High Cycle Fatigue 2025. Forschung im Ingenieurwesen 86, 160.</li> <li>• L. Pagliari, I. Hong, A. Kahraman, F. Concli (2026) Experimental and Numerical Analysis of Low-Cycle Tooth Bending Fatigue in Case-Carburized Gears. International Journal of Fatigue 202, 109237.</li> <li>• L. Pagliari, L. Fraccaroli, L. Maccioni, F. Concli (2024). Analysis of Tooth Bending Fatigue of AISI 9310 Gears Through Strain-Based Criteria. American Gear Manufacturers Association Fall Technical Meeting 2024, FTM 2024.</li> </ul>
<b>Language competence</b>	<ul style="list-style-type: none"> <li>• English, proficiency level, C2</li> <li>• Spanish, B2</li> <li>• German, B2</li> </ul>

Date 22.12.2025