EDOARDO VICENTINI

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Italian: Native
English: Fluent
Spanish: Fluent

SUMMARY

Optical engineer and applied physicist with 8+ years of experience building complex systems, developing data pipelines, and solving hard technical problems. Worked at the excellence of my field, collaborating with world-leading scientists and Nobel Prize–winning researchers. Strong background in lasers, imaging, precision sensing, and computational data analysis, with solid Python and MATLAB skills and a passion for clean, reliable code. Delivered innovative technologies such as the first dual-comb hyperspectral digital holography system. Experienced in breaking down complex challenges, proposing clear solutions, and leading young researchers to deliver results. I thrive in fast-paced, excellence-driven teams and bring a rigorous, hands-on, problem-solver mindset — the same attitude I'm excited to bring to Bending Spoons.

Innovation | Data analysis | Problem-solving | Team-working | Project management

PROFESSIONAL EXPERIENCE

Post-doctoral Researcher (2021 - now) CIC nanoGUNE, Donostia-San Sebastian, Spain.
Developed technologies for nanoscale imaging and analysis of novel materials.

Post-doctoral Researcher (2021) IFN-CNR, Milan, Italy.
Designed and implemented laser-based instrumentation for precision gas sensing.

Visiting Researcher (2020): Max Planck Institute for Quantum Optics, Munich, Germany.
Developed the first hyperspectral digital holographic system.

Assistant professor (2018-2021) Polytechnic University of Milan, Milan, Italy

Over 100 hours of lectures in physics to undergraduate engineering students.

Pre-doctoral Researcher (2017-2021) Polytechnic University of Milan, Milan, Italy
Designed and implemented laser-based infrared spectrometers for precision gas sensing.

KEY SKILLS

Optical Design and Characterization: 8 years of hands-on experience in advanced optics laboratories designing, aligning, and characterizing optical systems for infrared spectroscopy, microscopy, and imaging applications.

Data Analysis and Problem Solving: Proficient in processing experimental data; skilled in developing custom code (Python, MATLAB, etc.) to extract physical parameters and model complex optical phenomena.

Continuous Learning and Adaptability: Committed to ongoing professional development, including mastering new techniques, able to quickly adapt to evolving challenges and technologies.

Effective Communication: Experienced in presenting complex scientific concepts clearly in both written and oral formats; able to tailor technical content for both expert and non-specialist audiences (e.g. conferences, grant proposals, outreach).

Teamwork and Project Leadership: Demonstrated ability to lead interdisciplinary teams; supervised students, coordinated research tasks, and collaborated across academic and industrial partners to achieve project milestones.

SELECTED ACHIEVEMENTS

Bernard J. Couillaud Prize in Ultrafast Lasers (2023): 20'000$ prize recognizing excellence on the frontiers of ultrafast lasers.
Marie Sklodowska-Curie Action Postdoctoral Fellowship (2022): Most competitive European fellowship for post-doctoral research awarded by the European Commission.
Helmholtz Prize for Applied Metrology (2022): 20'000€ prize given for outstanding scientific and technological research in precision measurement in physics, chemistry, and medicine.

EDUCATION

PhD in physics (2017 – 2021)
Polytechnic University of Milan, Italy
Master's degree in physics engineering (2015 – 2017)
Polytechnic University of Milan, Italy
Bachelor's degree in physics engineering (2011 – 2015)
Polytechnic University of Milan, Italy