

GUGLIELMO TRENTINI

PHD STUDENT IN ADVANCED SYSTEM ENGINEERING

SHORT DESCRIPTION

I'm a physicist with an analytical yet practical outlook on life. I had experience in synthesis and characterization of nanoparticles, green materials, gas sensors and vacuum systems. I'm passionate about biomimetical and interdisciplinary approaches. I love nature and want to use science to better our relationship with it.

SECTOR SKILLS

- Good knowledge of Python, C++, Matlab and easily adaptable to new languages
- Experience in data gathering, processing and modelling
- Microelectronics, machining and technology-recycling hobbyist for DIY projects
- Years of tutoring experience in math and physics
- Broad multidisciplinary base with a specific interest on naturally occurring nanostructures

OTHER SKILLS

- Good knowledge of statistics
- Fluent in English (C1 certificate) and good comprehension of German (B1)
- First hand know-how in 3D modelling, 3D printing and machining
- Excellent at fast pace prototyping with a first order approximation approach
- Experience in handling and interacting with customers
- Organized and thorough

EDUCATION

FREE UNIVERSITY OF BOZEN-BOLZANO

PhD student in Advanced System Engineering 10/2022-present

- Experience in synthesis and in characterization of the mechanical, thermal and gas permeation properties of biopolymers
- Teaching assistant for Electronic Devices course

UNIVERSITÀ DEGLI STUDI DI TRENTO-FONDAZIONE BRUNO KESSLER

Master's Thesis 03/2022-10/2022

- Thesis on Cellulose nanocrystals hybrid films for gas selectivity enhancement of chemoresistive metal-oxide based sensors
- Experience in vacuum systems and mass Spectroscopy

NORWEGIAN UNIVERSITY OF SCIENCE AND TECHNOLOGY

Erasmus Exchange 08/2021-12/2021

- Practical experience with MRI data processing
- Developed simple particle Monte Carlo simulation in Python
- Acquired an interest on microfluidics and on biological sensors

UNIVERSITÀ DEGLI STUDI DI TRENTO

Master's Degree in Physics 09/2020-Present

- Knowledge of proper modeling methods
- Knowledge of experimental methods and statistics
- Developed good coding skills for scientific-based programming

UNIVERSITÀ DEGLI STUDI DI TRENTO

Bachelor's Degree in Physics 09/2015-03/2020 score 87/110

- Thesis on Cellulose Nanocrystals gas selective films: I worked for six months in Trento's University Nanoscience laboratory with prof Scarpa
- Experience in data gathering processing, and modeling
- Strong mathematical background

WORK EXPERIENCE

INTERN

Bruno Kessler Foundation | 06/2020 - 09/2020

- Modeling of data gathered for the project "Che Aria Tira" on polluting gasses in the city of Trento
- Preparation, testing, and characterization of Hydrogen selective membranes for gas sensing applications

MANAGER FOR TOURIST ACCOMMODATION

Casa Ester | 2015 - Present

- Valorization of the territory
- Handling of check-in and check-out
- Maintenance and repair of the facilities

INFORMATION OFFICER AND TOURIST GUIDE

Tourist consortium Valle di Ledro | 2014 - 2015

- Public relationships and valorization of the district
- Direct interface with the tourist facilities and accommodation
- Planning and organization of events