# MATTIA MURACCHIOLI

## PROFESSIONAL EXPERIENCE

### **PhD Visiting**

Movember 2022-March 2023

♥ University of Oulu, Oulu, Finland

 Development of new ceramics membranes for reactor waste adsorption. The main object was to optimize the process and the properties through extensive use of R and Python for the data analysis based on a design of experiment approach

#### **PhD Student**

October 2020-Present

**Q** University of Padua, Padua, Italy

• Development of statistical models to predict the properties of new types of materials for environmental and energy-storing applications. The statistical methods have been developed through extensive use of R and Python for the data analysis based on a design of experiment approach. Latest studies on possible machine learning approach

#### **Assistan Research**

Movember 2019-October 2020

♥ University of Padua, Padua, Italy

 I was involved in a European project aimed to build an Ecosystem for the up-scaling of lightweight multi-functional concrete and ceramic materials and structures. My responsibility was to develop a new characterization method for advanced ceramics materials

# **CONFERENCE & PUBLICATIONS**

### **ICACC 2023**

聞 January 2023

Daytona, USA

 Invited talk at the most important conference in the world related to ceramics materials (organized by the American Ceramics Society); presented the work related to my latest published article with a strong focus on further machine learning techniques to predict the properties of materials

### **Article**

Movember 2022

 Modeling the compressive strength of metakaolin-based geopolymers based on the statistical analysis of experimental data

### **Ceramics in Europe**

♥ Cracow, Poland

 Oral presentation regarding the optimization of a new manufacturing process technique for ceramics materials throughout a Design of experiment approach.

#### **Geopolymer-Camp**

September 2021

**♀** Saint-Quentin, France

• Oral presentation regarding the granulation and Robocasting process of geopolymer for Carbon-Dioxide Adsorption

### **EDUCATION**

### **PhD** industrial Engineering

## 2020 - Present

**Q** University of Padua

#### Master in Datascience

## 2022 - Present

### Master degree in materials engineering

**2016 - 2019** 

**Q** University of Padua

# Bechelor degree in chemical engineering and materials

**2011 - 2015** 

**Q** University of padua

### HARD SKILLS

Additive Manufacturing Data Science

Modeling Python R Power BI

Tableau Chemistry Material Science

Statistics

### SOFT SKILLS

Analytical mind Passionate

Emphatic Perfectionist Ambitious

Team Work Leadership

### **HOBBIES**

PC Buiding Swimming
Playing Video Games

# **LANGUAGES**

Italian English



## OTHER INFORMATION

- Availability to travel and transfers abroad
- Working availability: full time