Curriculum vitae

PERSONAL INFORMATION

DAL'MAZ SILVA, Walter

- 69 cours Richard Vitton, Lyon 69003, France
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- walter.dalmazsilva.manager@gmail.com
- www.linkedin.com/in/walter-dal-maz-silva/
- Date of birth 25th May 1989 | Nationality Brazilian

SKILLS

Spoken Languages	Brazilian Portuguese, English (C2), French (C1), Spanish (B2), German (A2)
Project Management	Planning, forecasting, quality, following KPI's, reporting
Scientific Programming	Advanced Python, Julia, Fortran, C and C++, Octave
Numerical Simulation	Ansys Fluent, OpenFOAM, Elmer Multiphysics, FEniCSx
Materials Science	Mechanical, thermal, and microstructural analyses, thermodynamics
Data Science	Massive data analysis, machine learning, and scientific computer vision

CAREER

02/2022 – Present — Research Engineer at Imerys, Vaulx-Milieu – France

- CFD simulation of rotary kilns and fusion furnaces (heat transfer, combustion, flow patterns, ...)
- Modeling of materials kinetics (JMKA approach, global kinetics, calcination, dehydration, ...)
- Development of an in-house state of the art rotary kiln model with coupled materials kinetics

05/2017 – 01/2022 — Research Engineer at ArcelorMittal, Maizières-les-Metz – France

- Physics and data-based low-order modeling of gas-solid processes in galvanizing furnaces
- Leaded digital transformation, Data Science, and machine learning in a team of 60+ people
- Organized and handled industrial trials for crises solution and deployment of new technologies

11/2013 – 11/2016 — Research Engineer at IRT M2P, Metz – France

- Studied a surface hardening route of gear steels for aerospace and automobile applications
- Materials (SEM/TEM, mechanical, chemical) and atmosphere (GC) characterizations
- Modeling of transport phenomena at both atmosphere kinetics and diffusion in solids

01/2012 – 10/2013 — Product Engineer at Aker Solutions, Curitiba – Brazil

- Materials selection and specification, medium compatibility and failure analyses
- Support to welding documentation and specification, analysis of process deviations
- Metallic materials supplier audit for oil & gas standards compliance and customer requirements

ACADEMIC

2013 – 2017 — Materials Science and Engineering, PhD
Nancy, France — Université de Lorraine (UL) (supervisor: Belmonte, Thierry)

2007 – 2011 — Materials Engineering, Degree
Florianópolis, Brazil — Universidade Federal de Santa Catarina (UFSC) (supervisor: Maliska, Ana Maria)