



Hamza RAHALI

Numerical Analysis Engineer with two years of experience, possessing a solid academic background, capable of analyzing and solving complex problems. Rigorous and methodical, I am motivated to contribute to innovative projects and to continue my professional development within a dynamic team.

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Ariana, Tunisia

26 Years

[hamza-rahali](#)

PROFESSIONAL EXPERIENCE

Numerical Analysis Engineer at Stellantis France

Segula Technologies, Tunis, Tunisia

01/2023 - Present

Tasks :

- Mesh, materials, loads and boundary conditions : ANSA
- Calculation results deduction (Abaqus, HyperView).
- Post-processing and results analysis.

Research Internship

ENIS & HEIG-VD, Tunisia et Switzerland

04/2024 - Present

Tasks :

- Study thermal shrinkage in the L-PBF process,
- Develop an algorithm to predict thermal deformations.
- Prototype manufacturing and alloy parameter identification.
- Develop an algorithm for shrinkage anticipation and implement it with new measurements

Final Year Project Internship

PLM Ressources Sarl, Bizerte, Tunisia

02/2022 - 12/2022

Tasks :

- Define the mathematical model of gas flow.
- Determine the necessary aerodynamic constraints for Fluent Ansys CFD software.
- Simulate critical gas density and predict an intelligent solution to assist in aircraft landing.

EDUCATION AND TRAINING

Master of Research M2 - Complex and Intelligent Systems – Multiphysics Option

Tunisian Polytechnic School

09/2023 - 03/2024

Engineering cycle - Mechanical engineer

Bizerte National Engineering School

09/2019 - 12/2022

Preparatory Technical Cycle, Technology (PT)

Preparatory Institute for Engineering Studies, Gafsa, Tunisia

09/2017 - 07/2019

ACADEMIC PROJECTS

Project : Design of a mobile robot controlled by a mobile phone

09/2020 - 04/2021

- Develop model in SolidWorks and select suitable materials.
- Select power board, Arduino board, and control tools.

Project : Design and simulation of a lift for people with special needs

09/2020 - 06/2021

- Design of a folding model with CATIA V5.
- Choice of materials
- Finite element simulation using Abaqus.

SKILLS

CAO : Catia V5 | SolidWorks | Siemens Nx | ANSA.

FAO : Mastercam | SolidCAM |.

Numerical simulation : Abaqus | Ansys | MSC Nastran

| siemens STAR-CCM+ | HyperView | nCode DesignLife.

LEAN methodologies : AMDEC | PDCA | 5M | 5S.

Quality management : ISO 9001 | ISO 14001.

Languages : C | C++ | Python | MATLAB | Pascal.

OS : Windows | Linux.

Others : OptiMaint | Arduino | MS Project | ISIS | LDorado.

COMMUNITY LIFE

Member

AERO Club ENIB

06/2019 - 06/2022

- Participation in the organisation of activities.
- Participated in competitions and won several prizes (AEROSPINA 2020 - SIMON 1 & 2).

Member

Tunisian Red Crescent

06/2016 - Présent

- Participation in the national vaccination day (COVID-19)
- Participation in the organisation of cultural and educational events.

CERTIFICATIONS

CSWP- Drawing Tools

Dassault systemes.

CSWA- Mechanical design & Simulation

Dassault systemes.

Mastercam Essentials & Principles of Machining & 2020 : Laithe

CNC Software, Inc.

Applications in Engineering Mechanics

coursera.

Quality management ISO 9001 Version 2015

Spectrum training center

SQL & Python Core

Sololearn (22102159-1060), (22102159-1073)

Machine Learning Onramp & Matlab Onramp

MathWorks

LANGUAGES

Arabic

Native language

English

B2

French

C1

INTERESTS

Soft Skills | Football | Video games | Camping.