

ROMAIN MALLARD

UTC engineer in mechanics

GAEL - Study of the dynamic behavior of an industrial system under biophysical constraints



DIPLOMAS AND EDUCATION



CONTACT

+ (33) 06 46 82 87 46

@ romain.mallard@proton.me

in linkedin.com/in/romain-mlld



international mobility



SKILLS

Project management

Writing and research work

Sustainable engineering

Energy strategy

Socio-environmental transition

French Native

English European C1

German European B2

Programming MATLAB, C, VBA, Shell



INTERESTS



Running, swimming



Violin and orchestra

Elite music section at UTC



Humanities and social science



Environmental philosophy

2017 - 2022



Engineering school - University of Technology of Compiègne

Bachelor and Master: Mechanical engineering, fluid and mechanical simulation for engineering: vibration mechanics, fluid dynamics, CFD, (...) | General philosophy, HASS, history of techniques, sustainable engineering.

Minor: Communication, Controversy and Technology (*development of tools for the understanding and the analysis of controversies in the engineer profession*).

2019



Erasmus semester - Ernst-Abbe Hochschule Jena (Germany)

Course: Mechanical engineering (fluid dynamics, thermodynamics, mechanical modeling).



WORK EXPERIENCE

2024



FTC in preparation for a thesis: Study of the dynamic behavior of an industrial system under biophysical constraints

Laboratory: GAEL, FLORALIS (UGA - INP- CNRS), AIRBUS

Tasks: Development of system dynamics model to analyse the impact of material and energy flows contraction on AIRBUS Atlantic's activities. Prospective analysis of the factors limiting the production capacity and suggestion of regulatory measures to support the transformation of the industrial system, in a strong sustainability perspective.



2023



Project leader energy theme group

Company: Les Shifters, CTE, GT ACCE.

Tasks: Transdisciplinary analysis and mapping of the energy controversy in France, in order to identify energy sources, participants involved in this controversy, and to understand the relationship between them.

2023 - 2024



Thermohydraulic study engineer

Company: Framatome, Lyon.

Tasks: Execution of safety studies on French nuclear power plants and EPR. Experience in energy issues and nuclear culture.



RESEARCH PROJECT

2021



Optimization of an aircraft wing actuator support

Partner company: ALTAIR

Performance computing of the existing model with finite element method. Topological optimization of the support to create models by additive and subtractive manufacturing. ALM design with polynurbs technology.

2021

Culture and history of techniques

Subject: technique and technology, evolution and technical systems, history of engineering, industry and Luddism.

Essay: *How is our use of social networks deeply changing human relationships?* : history of social networks, issues for the future, ethics and privacy.

2020

Is low-tech the future of engineering?

Lecture: politicize sobriety (AgroParisTech), environmental retrospective (EHESS), transition scenarios (négaWATT).

Essay: *Is the choice of low-tech a way to resist progress?* : analysis of the low-tech controversy, identification of participants and the links between them, identification of the tensions, presentation of issues for the modern engineer.