Research Engineer Scientific Computing Expert

| **Nathanaël Muot PhD.**
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| LinkedIn: *https://linkedin.com/in/nathanaelmuot* | github: *https://github.com/nmuot*
| 40 years (1983) | remote and mobile

Profile

Passionate about scientific and technical challenges, motivated by teamwork and the human dimension. My ability to work in a multi-disciplinary team and tackle complex subjects allows me to make a significant contribution to the development of pragmatic and effective solutions that can address the challenges of nowadays and the near future.

Skills

- Creative Thinking, Analytical, Teamwork, Mentor-ship, Leadership, Speaker, Work ethic, Dyslexic Advantage
- Product manager, Project manager, Strategy, Multi-skilled team leader
- Applied mathematics, Algorithms, Modeling, High-performance computing (HPC), Digital Twin
- Physics, Electromagnetic, Simulation, Signal processing, PDE, Wave Equations
- Software development, Life cycle, OpenSource, Quality assurance, Agile development, CI, CD
- Linux, Windows, Python, C, C++, Fortran, Julia, Git, Emacs, Jupyter

Work Experience

Since 2019 : **Operation & SQA Manager** at *AxesSim subsidiary of APAVE/Sopemea*

- As operations manager, I am responsible for monitoring up to 8 projects, planning budgets, managing deadlines, and overseeing deliverables.
- I serve as a supervisor for a multi-disciplinary and multi-site team of 8 people, fostering a collaborative work environment.
- I have led projects in several national joint R&D initiatives involving both industry and academia, with a dual focus on civil and defense applications.

Since 2010 : **Senior R&D Engineer** at *AxesSim*

- I am responsible for conducting numerical studies of complex and critical systems for major French industrial clients
- I lead research and development projects focused on innovative digital modeling approaches for aeronautical certification.
- I implement state-of-the-art computing engines for simulating electromagnetic phenomena, including full-wave, MTLN, and Circuit simulations.
- I have designed a new mesh generation technique for the FDTD numerical method.
- I also take part in technological and scientific monitoring activities.

2013-2010 **PhD student** at *ONERA* and *AxesSim*

Education

2013-2010 **PhD in Physics and Applied Mathematics** at *[Institut Supérieur de l'Aéronautique et de l'Espace (ISAE)][issue]* Archie HAL
2009-2005 **Ingénieur Télécom** at *[IMT Atlantique (anciennement TELECOM Bretagne)][MIT]*
2009-2008 **Master recherche SISEA** at *IMT Atlantique (anciennement TELECOM Bretagne)*

Hobbies and Interests

Community work: The Shifters members (EVCO local point of contact), Hop La Transition - Comprendre pour Agir

Hobby: I like to spend some time with my children at the riverbank.

Sports: cycling to work and jogging.

Last reading book: l'homme qui rit (Victor Hugo), Théorie des jeux (Nicolas Eber)