# Pierre Kibleur

## Ph.D., Engineer in CSE

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French nationality • Driving license B

*With hands-on experience in materials and robotics, my ambition is to contribute to the deployment of automation and technical solutions in the defense industry*

## Experience

**UGent Center for X-ray Tomography (UGCT), Ghent, Belgium**

- 3D Data analyst — 2022–present

Consulting on industrial R&D, using non-destructive testing to assess quality, product development, and processes. Group promotion at several conferences and seminars. Lecturer on deep learning applications

- Researcher — 2018–2022

Dynamic testing of fiber-based composite materials with quantitative image processing. Presenter at 6 international conferences; presentation award at ICTMS2022. Gave training on robotics and deep learning

**Confinis AG, Geneva, Switzerland**

- Consultant (4 months internship) — 2018–2018

Writing regulatory compliance of joint prostheses in preparation of marketing application dossiers

**University of Fribourg, Fribourg, Switzerland**

- Scientific support staff — 2018–2018

Robotic modeling and decoding of the primate arm to parameterize a therapeutic brain-computer interface

**G-therapeutics, Lausanne, Switzerland**

- Roboticist (9 months internship) — 2017–2017

Programming the Rysen medical robot for gait rehabilitation: defined the C++ control architecture, implemented training tasks for patients, and integrated embedded IMU sensors for real-time state estimation

**École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland**

- Teaching assistant — 2015–2016

Providing support in mathematics for a group of 20 second-year physicists

## Education

**Ghent University, Ghent, Belgium**

- Ph.D. Bio-science Engineering; thesis on “4D X-ray micro-tomography investigation of water-induced swelling of wood fiberboards” — 2018–2022

**EPFL, Lausanne, Switzerland**

- M.Sc. Computational Science and Engineering; thesis on “Bio-mechanical model of the primates’ upper limb: design of stimulation protocols for the recovery of reaching movements in tetraplegia” — 2015–2018
- B.Sc. Physics; Erasmus+ exchange at ULB, Brussels — 2011–2015

## Competencies

**Coding:** C/C++, Python, Matlab, Bash, shell, CUDA, Basic, C#, LaTeX
**Libraries:** Pandas, Scipy, scikit-image, OpenCV, TwinCAT, Keras, PyTorch, TensorFlow, numpy
**Software:** Git, Dragonfly, Avizo, VGStudio Max, Fiji, Abaqus, Solid Works, Fusion 360, Visio
**Environments:** Linux/Windows, Vim, Atom, Visual Studio, Jupyter, Overleaf, Microsoft Office Suite
**Soft skills:** Project management, Multidisciplinary collaboration, Creativity, Problem solving
**Communication:** Author of 24 peer-reviewed articles, regular presenter at conferences and meetings

## Languages

**English/French:** Fluent
**Russian/Dutch:** Limited proficiency

## Hobbies

Competition rowing: twice Belgian champion
Sailing, flute and saxophone