Pierre Kibleur

Ph.D., Engineer in CSE

pierre.kibleur@gmail.com • +33 (0)6 09 90 18 77
French nationality • Driving licence B

Experience

UGCT, Ghent, Belgium
-3D data analyst translating X-ray insight into answers to the questions of industrial and academic contractors. Lecturer on "Advanced applications of deep learning for X-ray CT" 2023-

-Doctoral researcher with a focus on wood fiber-based materials and quantitative image processing. Author of 11 peer-reviewed publications and presenter at 6 international conferences. Supervisor of 3 M.Sc. theses on the topics of precision imaging; deep learning; robotics 2018-2022

Confinis AG, Geneva, Switzerland
Consulting intern assessing the regulatory compliance of newly developed medical devices 2018

University of Fribourg, Fribourg, Switzerland
Research scientist writing a first-author publication 2018

GTX medical, Lausanne, Switzerland
Robotics intern in programming the Rysen body weight support system for gait rehabilitation. R&D delegate at the Delft University of Technology and Motek Medical in Amsterdam 2017

EPFL, Lausanne, Switzerland
Teaching assistant providing support in mathematics for a group of 20 second-year physicists 2016

Education

Ghent University, Ghent, Belgium
Ph.D. Bioscience 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 "Biomechanical 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

Technical skills

Imaging: X-ray CT, dual-energy CT, chemical doping, SEM, SEM-EDX, macro photography
Programming: C/C++, Python, Matlab, Bash, CUDA, Basic, LaTeX
Libraries: Pandas, Scipy, skimage, OpenCV, tikz, TwinCAT, OpenSim, TensorFlow
Software: Dragonfly, Avizo, Fiji, Abaqus, Solid Works, Git
Environments: Linux/Windows, Vim, Atom, Visual Studio, Jupyter, Overleaf
Office: LaTeX, Pack Office, Visio

Selected publications (3/13)

Kibleur, et al.: "Deep learning segmentation of wood fiber bundles in fiberboards" in Composites Science and Technology 2022
Kibleur, et al.: "Detecting thin adhesive coatings in wood fiber materials with laboratory-based Dual-Energy Computed Tomography (DECT)" in Scientific Reports 2022
Sinchuk, Kibleur, et al.: "Geometrical and deep learning approaches for instance segmentation of CFRP fiber bundles in textile composites" in Composite Structures 2021

Languages

English/French: Fluent
Russian/Dutch: Limited proficiency

Hobbies

Competition rowing
Flute and saxophone