

# Nicolas COMTE, Ph.D



## PROFILE

**R&D Engineer** with a Ph.D. in Computer Science. I have experience as a software engineer at Inria, followed by roles as an R&D engineer and Ph.D. student in collaborative projects involving Inria, Grenoble Hospitals, and Anatoscope. My expertise lies in machine learning, computer vision, and graphics, with a focus on their applications in biomedical imaging and motion capture.

## CONTACT DETAILS

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cometicon.github.io

## PERSONAL INFORMATION

**Citizenship** French

**Family** Married, 1 child

**Languages** French, English

## SKILLS

**Computer Sc.** Deep learning, Computer Vision, Computer graphics, Bioinformatics

**Software dev.** C++, Python, Git

**Sc. computing** Pytorch, Scikit-learn, R, Matlab

**Communication**  $\text{\LaTeX}$ , HTML, Gimp, Krita, Inkscape

## EXPERIENCE

**R&D ENGINEER/PH.D STUDENT** at *Anatoscope (France)*. **2019–pres.**

◇ Ph.D student/engineer in industrial and research projects in medical imaging and anatomical simulation.

◇ Skills: computer graphics, computer vision, deep-learning, anatomical simulation, Python/C++ programming.

**SOFTWARE ENGINEER** at *Inria (France)*.

**2016–2018**

◇ Development of fast and easy-to-use softwares for molecular phylogeny. See Treerecs and Seaview 5.

◇ Skills: Python/C++ programming, software design, molecular phylogeny

+ **TEACHING** at *INSA Lyon* C++ programming.

**RESEARCH INTERN IN COMPUTER SCIENCE** at *Inria (France)*.

**2016**

◇ Creation of artificial life models for study of evolution. See Aevol.

◇ Skills: Python/C++ programming, mathematical modeling, biostatistics, molecular biology, artificial life

**INTERN IN STATISTICS** at *Soladis (France)*.

**2015**

◇ Statistical analysis, development of an R package, writing of 180-page manual on statistical programming with R.

◇ Skills: R programming, statistics, teaching

## EDUCATION

**PH.D.** in Computer Science. *Université Grenoble-Alpes*. **2020–2023**

◇ Thesis title: *Learning scoliosis patterns using anatomical models and motion capture*.

◇ Skills: computer vision, computer graphics, deep-learning, biomechanics, anatomical simulations, motion capture, medical imaging.

**ENGINEER.** in Bio-Informatics and Modeling. *INSA Lyon*. **2013–2016**

◇ Skills: mathematical modeling, statistics, machine-learning, biology.

**BACHELOR.** in Bioinformatics. *Université de Lyon*.

**2010–2013**

◇ Skills: mathematical modeling, computer science, statistics, biology, genomics.

## AWARDS

**BEST POSTER IN ARTIFICIAL INTELLIGENCE APPLIED IN BIOMEDICAL IMAGING.** *IABM 2023, Colloque National en Intelligence Artificielle Appliquée à l'Imagerie Biomédicale*

**GOLD MEDAL** and **BEST COMPOSITE PART.** *IGEM 2014, International Genetically Engineered Machine competition.*

*See our student project Curly'On*

## PUBLICATIONS AND COMMUNICATIONS

See my Google scholar page or HAL profile.

## HOBBIES

**GRAPHICS:** infographics, illustration, digital drawing and painting.

**SCIENCE COMMUNICATION:** member of *Démesures 2017-2019 (France)*, communicator, speaker in *Geek Touch 2018, Fête de la Science 2017, 2018* and *Art-Science 2018*.

**PHOTOGRAPHY:** nature and wildlife photography.