# 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 Sci. Deep learning, Computer Vision, Computer graphics, Bioinformatics
Software dev. C++, Python, Git Sci. computing Pytorch, Scikit-learn, R, Matlab, Sofa
Communication 上下EX, HTML, Gimp, Krita, Inkscape

### **EXPERIENCE**

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

- ♦ Industrial and research projects in medical imaging and anatomical simulation.
- ♦ Computer graphics, computer vision, deep-learning, anatomical simulation.

### SOFTWARE ENGINEER at Inria (France).

2016-2018

- ♦ Development of fast and easy-to-use software applications for molecular phylogeny. See ☑ Treerecs and ☑ Seaview 5.
- ♦ C++/Python 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.
- ♦ Mathematical modeling, biostatistics, molecular biology, artificial life.

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

2015

- $\diamond$  Statistical analysis, development of an R package, writing of 180-page manual on statistical programming with R.
- ⋄ R programming, statistics, teaching.

BIOINFORMATICIAN, IGEM (competition), at INSA Lyon (France). **2014**  $\diamond$  Creation of a genetically modified bacteria for the treatment of polluted water. Student project for the international Biology competition iGEM (Boston, USA). C Curly'On

R programming, statistics, modeling, genetics.

# **EDUCATION**

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

- $\diamond$  Thesis title: Learning scoliosis patterns using anatomical models and motion capture.
- Computer vision and graphics, deep-learning, biomechanics, anatomical simulations, motion capture, medical imaging.

ENGINEER in Bio-Informatics and Modeling. *INSA Lyon.* **2013–2016**  $\diamond$  mathematical modeling, computer science, statistics, biology.

### **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.

### 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), animator, speaker in Geek Touch 2018, Fête de la Science 2017, 2018, ...

PHOTOGRAPHY: nature and wildlife photography.