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.

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, Computational biology Software dev. C++, Python, Git Sci. computing Pytorch, Scikit-learn, R, Matlab, Sofa Communication MEX, 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).

- ♦ 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

2016

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

COMPUT. BIOLOGIST, 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

statistics, modeling, molecular biology, simulation.

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.