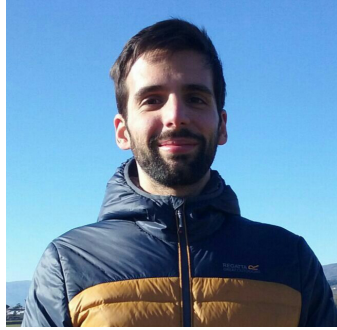


# EMILIO BERTI



(+45) 266 54 662 ♦ emilio.berti90@gmail.com

## SUMMARY

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I am a theoretical ecologist with a passion for math and computing. I am a very fast learner and I have worked in many different fields of biology, from the microscopic scale of muscle physiology to the global scale of vertebrates macroecology. I have a strong quantitative background, with expertise in mathematical and statistical modelling of complex systems using big databases at large spatio-temporal scales. I have a comprehensive knowledge of traditional statistical methodologies, e.g. linear regression, and with cutting-edge algorithms such as machine learning. I have outstanding programming skills, particularly in optimizing large computations using Geographic Information Systems (GIS). I am fluent in writing and spoken English skills and I have good communication skills in scientific and daily settings. I can propose and develop new ideas independently and have a very collaborative personality.

## WORK HISTORY

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### **PostDoctoral researcher**

*October 2020 – Present*

Theory in Biodiversity Sciences  
German Centre for Integrative Biodiversity Research (iDiv)  
Leipzig, Germany

### **Scientific consultant**

*May 2020 – July 2020*

Department of Bioscience  
Aarhus University  
Aarhus, Denmark

### **Teaching assistant**

*February 2017 – April 2020*

Department of Biology  
Aarhus University  
Aarhus, Denmark

## EDUCATION

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### **PhD**

*February 2017 – June 2020*

Section of Ecoinformatics and Biodiversity  
Department of Biology  
Aarhus University  
Aarhus, Denmark

### **Visiting PhD student**

*Fall 2018*

Department of Ecology and Evolution  
University of Chicago  
Chicago, IL

**MSc cum laude in Biology**  
Department of Ecology and Evolution  
University of Florence  
Florence, Italy

*2013 – 2016*

**BSc in Biology**  
Department of Physiology  
University of Florence  
Florence, Italy

*2009 – 2012*

## POSTGRADUATE COURSES

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<b>“Species Distributions Modelling”</b>	<i>2019</i>
Evora, Portugal – Lecturers: Prof. Miguel Araújo and Dr. Babak Naimi	
<b>“Megafauna ecology – shaping past, present and future ecosystems.”</b>	<i>2019</i>
Aarhus, Denmark	
<b>“Mixed models”</b>	<i>2019</i>
Aarhus, Denmark – Lecturer: Prof. Rodrigo Labouriau	
<b>“Writing and Speaking Science in English for Biology Students”</b>	<i>2019</i>
Aarhus, Denmark – Lecturer: Prof. Brian Sorrell	
<b>“Ecosystem roles of megafauna in the past, present, and future”</b>	<i>2017</i>
Aarhus, Denmark	
<b>“Mediterranean School of Complex Networks (MSCx)”</b>	<i>2017</i>
Salina, Italy	

## SKILLS

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### Language

Italian (native), English (fluent), Danish (beginner)

### Programming

R (expert), bash (expert), python (proficient), C (proficient), julia (proficient), sqlite (proficient), html (proficient)

### Software

Linux/GNU, Rstudio, Juno, Anaconda, Jupyter, QGIS, L<sup>A</sup>T<sub>E</sub>X, Markdown, Pandoc, Git version control, GitHub, Bitbucket, Overleaf

### Methods

Statistics, regression analysis, effect sizes, mixed models, variables selection, PCA, ordination and classification, optimization, machine learning, network analysis, mathematical modelling, extrapolation and forecasting, species distribution models, environmental niche modeling, spatial modeling, geographic information systems (GIS), demographic projections, quantitative genetic, big data, data visualization, data science, APIs, automation.

## TEACHING & ORGANIZED WORKSHOPS

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### Teaching Assistant

Statistical and Geospatial Modelling (2019)

Behavioural Biology (2018, 2019)

Geographic Information System (2017)

### Organized Workshops

“Cleaning online repository data for use in biogeography and macroecology” (2019)

“Running a species distribution model in R.” (2019)

“A (very) gentle introduction to Linux.” (2019)

## PUBLICATIONS

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**Berti, E.** & Svenning, J.C. (2020). Megafauna extinctions have reduced biotic connectivity worldwide. *Global Ecology and Biogeography*. DOI: [10.1111/geb.13182](https://doi.org/10.1111/geb.13182).

**Berti, E.**, Monsarrat, S., Munk, M., Jarvie, S., & Svenning, J.C. (2020). Body size is a good proxy for vertebrate charisma. *Biological Conservation*. DOI: [10.1016/j.biocon.2020.108790](https://doi.org/10.1016/j.biocon.2020.108790).

## LINKS

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- [Google Scholar profile](#)
- [Personal website](#)
- [ORCID](#)
- [LinkedIn](#)
- [GitHub](#)