

JAMIE HUDSON

I am a postdoctoral researcher whose work utilises statistical modelling and machine learning algorithms using large-scale genomic data to further our understanding of biodiversity and evolutionary processes.

I am seeking a new challenge away from academia, my goal is to use the skills developed during my academic career to help make important data-driven decisions.

Throughout my research career I have developed analytical, machine learning, and problem-solving skills. I have demonstrated interpersonal and leadership prowess, successfully managed projects from beginning to end, and demonstrated a high level of written and oral communication skill through peer-reviewed publications and presentations at international conferences.

I have >4 years experience with R/tidyverse and have taken quickly to the modern data tech stack (Python/SQL).



RESEARCH EXPERIENCE

present
|
2020



Research Fellow

University of Southampton

📍 Southampton, UK

- Used statistical models such as PCA and approximate bayesian computation on large-scale genomic data (SNPs from GBS) to better understand population connectivity of important marine species in light of future climate change scenarios.
- Led collaborators from 11 different research institutions throughout Europe. I have developed a sampling strategy, and developed sampling protocols for colleagues to follow.
- Created interactive visualisations using R/Shiny to improve our sampling strategy.
- Responsible the workings and organisation of the Ecology and Evolution laboratory at the University of Southampton.

2020
|
2016



Postgraduate Researcher

University of Southampton

📍 Southampton, UK

- Position held as a PhD researcher.



EDUCATION

2020
|
2016



PhD Marine Biology

University of Southampton

📍 Southampton, UK

- Thesis: *The role of climate change, hybridisation, and biological invasions on the redistribution of marine biodiversity*
- Performed population genomic analyses (which included machine learning algorithms such as PCA, DAPC), ecological modelling (species distribution modelling using correlative algorithms), and oceanographic data manipulation (cleaning and analysing raster data) using R to a high standard.
- Worked with high resolution genomic data using the University of Southampton's HPC cluster which provided experience in writing simple BASH scripts.
- Led many concurrent research projects from start to finish. Conceived hypotheses, planned experiments, collected, cleaned, analysed and visualised data. Wrote scientific manuscripts and disseminated research to an international audience of experts.

CONTACT/ LINKS

✉ jhudsonbio@gmail.com

🌐 jamiehudson.netlify.com

in [linkedin.com/in/drjamiehudson](https://www.linkedin.com/in/drjamiehudson)

🐙 github.com/HudsonJamie

🐦 [jamie_bio](https://twitter.com/jamie_bio)

SKILLS

Advanced knowledge of:

📊 R {especially the tidyverse. Used every day for analyses and data visualisation}

Familiar with:

🐍 Python (via online course)

🗄️ SQL (via online course)

📊 Tableau (via online course)

🔧 Git {version control through GitHub}

LANGUAGES

English (Native)

Spanish (Intermediate)

*The source code for this is available [on github](#).
Last updated on 2021-12-01.*

2015
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2011

- **MSci Marine Biology (First Class Honours)**

University of Southampton

📍 Southampton, UK



TEACHING EXPERIENCE

2020
|
2017

- **Postgraduate demonstrator**

University of Southampton

📍 Southampton, UK

- Mentored early-career stage PhD and undergraduate researchers with technical aspects of data analysis and laboratory work to enable them to produce high-quality theses.
- Demonstrated laboratory skills and assisted practicals in two modules at the University of Southampton



RESEARCH OUTPUTS

- **Academic career**

- Experience in producing scientific publications in high-quality international journals and contributed as a co-author to the book "Population Genomics: Marine Organisms", and presenting both oral and poster presentations at international conference.
- Served as a reviewer in the peer review process for manuscripts in six different scientific journals, using an objective judgement to uphold the integrity of the scientific process in my field of research.



ADDITIONAL PROJECTS

- **Additional skills**

- Active contributor to Tidy Tuesday, a weekly data project promoting the manipulation and visualisation of a raw dataset using the R ecosystem. My submissions can be found on my [personal website](#) and [GitHub](#).