

BENJAMIN JOSHUA BURGESS

+447#####542

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London/Cambridge

- High-level research skills, with projects published in top peer-reviewed scientific journals.
- Over six years' experience in using R to conduct statistical analyses (e.g., generalised linear mixed models and [network meta-analyses](#)), create [interactive dashboards](#), and [develop specialist open-source software](#).
- Extensive experience in meta-analyses and evidence synthesis, having directed or supported several synthesis projects. Likewise identified significant statistical errors in multiple prominent meta-analyses.
- Strong leadership skills, having led multiple collaborations and supervised several student research projects.
- Adept at effectively communicating complex analyses to non-technical audiences in a concise manner.

EDUCATION

- PhD** *Computational Ecology - University College London - Pass with no corrections*
Sep 17 - Dec 21 Thesis Title: Null model detection of multiple stressor interactions in aquatic ecosystems.
- Investigated complex systems alongside researchers in academia and industry (DeepMind).
 - [Published a meta-analysis](#) on multiple stressor effects in a pre-eminent ecological journal.
 - Led senior researchers in an international collaboration to showcase that multiple statistical errors had occurred in several highly cited meta-analyses, leading to incorrect conclusions.
 - Developed an [R package \(multiplestressR\)](#), openly available via CRAN, to simplify statistical analyses and prevent methodological errors from occurring.
 - Collaborated on an international project to conserve endangered tulips. Constructed analytical pipelines and revised manuscripts prior to [publication in a high-quality journal](#).
 - Supervised three student research projects involving complex statistics (meta-analyses). One student was awarded the departmental prize for best third year dissertation in biology.
 - Presented research findings to large audiences (50+ people) within UCL, at invited external seminars (University of Sheffield), and multiple British Ecological Society conferences.
- MRes** *Computational Methods in Ecology and Evolution - Imperial College London - Distinction*
Oct 16 - Sep 17
- Studied topics including R, Python, statistics, and Geographic Information Systems.
 - Undertook a research project using a complex mechanistic model to predict global wildfires.
- BSc (Hons)** *Environmental Sciences - University of Nottingham - First Class*
Sep 13 - Jun 16
- Studied subjects such as climate change science, biogeochemistry, and Arctic fieldwork.

RECENT WORK EXPERIENCE

- Jan 22 - Present *Visiting Researcher - University College London*
- Applying a novel machine learning tool to screen abstracts for a large systematic review.
 - [Finalising manuscripts](#) which outline complex statistics to non-technical audiences.
- Dec 21 *Administrative Support - North Uttlesford Covid-19 Mass Vaccination Centre*
- Provided technical support to a medic, directly assisting the vaccination of ~1000 people.
- Nov 18 - Dec 19 *Postgraduate Teaching Assistant (Postgraduate Biologists) - University College London*
- Taught advanced statistics (e.g., mixed effect models), intermediate R, and basic Python.
 - Graded coursework and provided detailed feedback on how future work could be improved.
- Sep 17 - Dec 19 *Postgraduate Teaching Assistant (Undergraduate Biologists) - University College London*
- Introduced cohorts of ~80 students to coding, statistics and data analysis in R.
 - Explained challenging analytical concepts in simple terms to students of all abilities.
- Jun 16 - Oct 16 *Dispensary Assistant - Thaxted Surgery*
- Ordered, managed, and dispensed medications alongside answering patient enquiries.