# Max Carter-Brown



Phone: max@maxbrown.xyz

Homepage: https://www.maxbrown.xyz/

Open Source: https://github.com/Euphrasiologist

## **Professional Summary**

I am an experienced programmer and data analyst with a focus on performance and safety. I have created many software packages and made them available to the open source community in a variety of programming languages (Rust, Python, JavaScript, R, BASH). I have a rigorous research background with strong skills in data analysis, especially (generalised) linear mixed effect models, and data maipulation/visualisation (R, SQL, ggplot2, D3). I am confident in managing ongoing deadlines and changing priorities, sharing information and skills as part of a wider team, and communicating effectively with external partners.

#### **Key Skills**

- Proficient in several programming languages

- Data analysis

- Working on server and cluster environments

- Version control using Git and GitHub

- Knowledge of web development

- Excellent verbal/written skills

- Keen eye for detail

- Approachable, can-do attitude

## **Employment**

**Senior Bioinformatician**, 2020-present.

Tree of Life, Wellcome Sanger Research Institute, Cambrigde, UK.

I am responsible for:

- Software and algorithm development to handle a variety of data structures.
- Building pipelines on our servers, utilising appropriate pre-existing software tools where appropriate.
- Optimising codebases to work more efficiently in workflows. I liaise with other departments to ensure functionality is not compromised.
- Conducting primary research on genomic sequence data (Apple/Oak genomes), collaborating with, and presenting results to, the wider organisation.
- Outreach. I communicate complex information to a variety of audiences.

Assistant Technician, 3-month FTC, 2016.

Samara James, Surrey, UK.

Main duties:

- Search Engine Optimisation for the Samara James website.
- Social Media advertising, creating content to engage with online audiences and developing advertising content to identify and encourage new audiences.
- Comprehensive understanding of analytics and implementing these to maximise online exposure for Samara James.

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### Education

Ph.D. Plant Ecology and Genetics, University of Edinburgh, 2016-2020.

Thesis: Taxonomic complexity in eyebrights (*Euphrasia L.*, Orobanchaceae) and the British flora. During my PhD I was able to develop my skills in software development, statistical analysis, experimental design, time management, and writing. I was a demonstrator for undergraduate students, teaching bioinformatics on AWS servers.

B.A. Biological Sciences, University of Oxford, 2013-2016.

# Publications and Open Source Software

I have published several scientific publications, mainly on plant ecology and genetics. See my ORCID ID for full details - https://orcid.org/0000-0003-2561-516X.

Software I have published online, mainly in bioinformatics and statistics, can be found on my GitHub account - https://github.com/Euphrasiologist.

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