Léo Gorman

Doctoral Student

github.com/l-gorman linkedin.com/in/léo-gorman-880014199

Data science PhD student at the Alan Turing institute and the University of Bristol. Working to help rural development organisations make the most of their data through: 1) the development of open software to support the collection of interoperable and reusable data; 2) using advanced analytical methods and data-sources to understand multi-level heterogeneity of farming systems; 3) supporting courses to help researchers to write robust and reusable software.

SKILLS

Tools and Languages Quantitative Research Python, R, Git, Express, React, Ansible, MongoDB, LaTeX, Linux

Clustering, Hierarchical Modelling, Bayesian Methods, Geospatial Analysis

English, French (fluent speaker)

TECHNICAL EXPERIENCE

Data Science Specialist / Ask-JGI

University of Bristol

Communication

Jan 2022 — Present

Bristol, UK

- Providing data-science and software-engineering support for university research staff
- Communicating with researchers with a wide range of technical abilities
- Working collaboratively with other support staff to tackle challenges in new domains

Doctoral Student Jan 2022 — Present Bristol/London, UK

University of Bristol & The Alan Turing Institute

- Identifying key research bottlenecks through a systematic review
- Developing software to support the collection, processing, storage, and access of household survey data.
- Building pipelines for continuous development and deployment of software.
- · Coding collaboratively using git and pair coding exercises.
- Using a range of frameworks for testing code. Implementing unit testing, integration testing, and mocking.
- Working with different user groups to codesign software
- Implementing advanced analytical methods to understand multi-scale heterogeneity and capture uncertainty
- Supporting teaching in multiple programming languages

Consultant Software Engineer / Legume SELECT

International Livestock Research Institute

Feb 2021 — Apr 2021

Bristol, UK

- Developing software to support recommend legumes to farmers, informed by focus group discussion
- Implementing changes to meet tight deadlines
- Building application with offline functionality and responsive data visualisation.

Consultant / RHoMIS Feb 2018 — Oct 2019

International Livestock Research Institute

Bristol, UK

- Interperate and refactor large codebase to improve speed and automate data-processing
- Conduct analyses for research publications and report writing
- · Organise and lead training of enumerators in English and French. Working in Burkina Faso, Burundi, Comoros, DRC, and Kenya

EDUCATION

PhD in Data Science, University of Bristol & The Alan Turing Institute Ongoing Master of Science in International Development (Distinction), University of Bristol Sep 2018 Bachelor of Science in Physics (2.1), University of Bristol Jul 2017

ACTIVITIES

Data Security Training: GDPR, UK GDPR, Cyber Security, Protected Premises, Anti-bribery, Anti-Money Laundering Analysis Training: Introduction to Bayesian Methods Using STAN, Introduction to Deep Learning, Introduction to Convolutional Neural Networks (CNNs), Introduction to Multi-Level Modelling, Best practices in Research Software Engineering October 2019 Competition (1st Prize): International Farming Data Competition March 2018

PUBLICATIONS

Gorman, L., et. al. (2021) What's Stopping Knowledge Synthesis? A Systematic Review of Recent Practices in Research on Smallholder Diversity Frontiers in Sustainable Food Systems

van Wijk, M. Hammond, J., Gorman, L., et. al. (2020) The Rural Household Multiple Indicator Survey, data from 13,310 farm households in 21 countries. Scientific Data (46)

Hammond, J., et. al. (2020) Towards actionable farm typologies: Scaling adoption of agricultural inputs in Rwanda. Agricultural Systems (183)