Adam J Campbell PhD

mobile: 022 698 1266
email: campbead@gmail.com
linkedin: adamcampbellphd
website: adam-campbell.com

Summary

- Project management of the full data analysis lifecycle. Implementing projects from data processing, cleaning, and problem refinement, onto statistical inference and model integration. Delivery of interactive, engaging, and insightful data projects with 12 years of experience in academic research and government projects.

- Success working within small, collaborative teams, with both onsite and remote analysts, scientists and engineers to deliver data, insights, and modelling products.

- Developing business requirements for IT projects by eliciting responses from customers to best understand their needs.

Experience

Kaitātari | Data Analyst   March 2021 – Present

Ministry for the Environment – Joint Evidence, Data, and Insights Division

- Creating data pipelines with scheduled queries from remote databases, automated ETL, using onsite and cloud databases for storing data and analyses.

- Standardising intergovernmental data sharing by creating templates with uniform language around usage, privacy, and security.

- Improving development-deployment workflow by designing tools for publishing containerised app on an internal server, saving our team dozen of hours each month.

- Communicating actionable insights through data visualisations, statistical inference and customised reporting tools using R Shiny and ArcGIS online.

Business Analyst and Geospatial Analyst   August 2018 – March 2021

Dunedin City Council – Business Information Systems

- Delivered a new security education platform to the business. Starting from a proof of concept, compiling requirements, understanding user-stories towards a final implementation for ongoing education being used by nearly 1000 employees.

- Developed geospatial dashboards, including a dashboard to visualise traffic flow integrating model output, calculating KPIs and flow statistics through key corridors.

- Designed a machine-learning tool to categorise council documents. Developing an ML clustering algorithm tool to sort documents with similar keywords and phrases in full-text. Allowing archivists to quickly sort through incredible amounts of documents.

Postdoctoral Researcher   September 2015 – August 2018

University of Otago – School of Surveying

- Developed a new multivariate statistical analysis method for interpreting present-day changes to Antarctica's ice shelves. This method combined computational models with geospatial-time series data to create statistical fingerprints for ice shelf events, which correctly identified the timing and magnitude of past known events. The model used to forecast the next 300 years of ice shelf evolution.

- Designed, conducted and presented original research: writing of 5 peer-reviewed publications, and presenting at 5 conferences, in New Zealand and abroad.

- Lectured Surveying papers in topics of statistics, maths, and computational analysis.

Postdoctoral/Graduate Researcher   September 2009 – September 2015

University of Washington

- Mentored staff and students the best-practices for crafting data visualisations and communicating insights by facilitating 8 seminars across the university.

- Published PhD dissertation and 2 peer-reviewed publications, presented research at ~15 conferences, and 2 large (100+ people) public lectures.

Education

Ph.D. Earth and Space Science, University of Washington   2015

    Dissertation: Could narrow marine embayments prevent sea-glacier invasion, and protect photosynthetic life during a Snowball Earth?

M.S. and B.S. Geology, Portland State University   2009

Software

R / tidyverse/ Shiny	Python / Anaconda	git
ArcGIS/QGIS	Elasticsearch	SQL
Linux OS	OSX	PowerBI

Service

- Co-organiser for Open Data Dunedin Meetup   2018 – Present
- Guest Lecturer for Surveying 208 paper at U. Otago   April 2019
- Manger of Engage Science, a science communication training program   2013 – 2015

Awards

- Regional Winner, New Zealand Space Challenge   May 2018
- David A. Johnston Award for Research Excellence, U. Washington   May 2015
- Best Presenter, Earth and Space Sciences Research Gala, U. Washington   April 2014

Activities

Running	Bicycling	Beer Brewing