An introduction to Jason Lessels

Jason Lessels

2015-04-23

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# To install and reproduce this resume use:
library(devtools)
install_github("johnDorian/jasonlessels")
library(jasonlessels)
# For more information...
help(package = jasonlessels)
# or to view this resume
vignette(topic = "resume", package = "jasonlessels")
# Now for the actual resume...
Employment()
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2014 - Present, Prime Four Beast Race

I performed race contestant profiling and post race analysis.

2013 - Present, Post Doctoral Research Fellow, Aberdeen University

Responsible for integrating hydrological and ecosystem models to understand the implications of climate change on soil carbon dynamics.

2008 - 2013, Environmental Statistics Tutor

Tutored classes in statistical theory and lead practical classes using R and other statistical software.

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Education()
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2014, Machine Learning, Coursea (Stanford University)

2009 - 2013, PhD, University of Sydney

Thesis Title: The optimisation of water quality sampling and load estimation

2004 - 2008, Bachelor Land and Water Science (Hons), University of Sydney

First Class Honours, Deans award Modules included: statistics, hydrology, soil science, GIS remote sensing, chemistry, geology, agronomy

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Skills()
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Computing skills:

- Applications: MS Office, ArcGIS, GRASS, QGIS, Latex, Genstat, JMP
- Programming Languages: R, C++, and experience with: Python, Java, Fortran, Matlab

Teaching skills:

- Supervised first, second and third year applied statistics practicals and exams.
- Have lead first, second and third year applied statistics tutorials.
- Supervised second year hydrology practicals.

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R_packages()
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ggsnippets: Additional functions for the `ggplot2` package.

TSAgg: Time series aggregation for incomplete time series data.

BomDataRipper: A package that provides the ability to download weather data from the Australian Bureau of Meteorology website.

WIDataRipper: This package provides the ability to obtain data from the NSW government water information website from within R.

hydroEFS: Implemented in R and C++, this package provides the ability to find and summarise streamflow events.

geoRExtended: This package provides additional optimising methods for the likelihood function and also provides additional functions.

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Refereed_papers()
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Karunaratne, SB, Bishop, TFA, Lessels, JS, Baldock, JA and Odeh, IOA (2014) **A space-time observation system for soil organic carbon**, Soil Research, accepted, in press

Lessels, JS and Bishop, TFA (2013) **Estimating water quality using linear mixed models with stream discharge and turbidity**, Journal of Hydrology, (498) 13-22

Lessels, JS and Bishop, TFA (2013) **Estimating the effect of sample size on the uncertainty of mean total phosphorus using historical data**, Hydrological Processes, Accepted, in press

Lessels, JS and Bishop, TFA (2012) **Event-based water quality monitoring using strat- ified random sampling designs**, In Proceedings Hydrology and Water Resources Symposium.

Lessels, JS and Bishop, TFA (2011), **A geostatistical comparison between routine and event-based water quality sampling**, In Proceedings of the 34th World Congress of the International Association for Hydro-Environment Research and Engineering: 33rd Hydrology and Water Resources Symposium and 10th Conference on Hydraulics in Water Engineering.

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Conference_presentations()
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European Geophysical Union, General Assembly 2014: Using isotopes to investigate hydrological flow pathways and sources in a remote Arctic catchment

American Geophysical Union, General Assembly2013: Keeping it simple: a conceptual model of DOC dynamics in a subarctic alpine catchment

useR! 2011: Presentation: Applying geospatial techniques to temporal data

European Geophysical Union, General Assembly 2011: Generalised linear mixed models for predicting the probability of exceeding water quality guidelines