Sebastian Sciarra

Data scientist

seb@sciarra.io

Skills

R · SQL · Python · LaTeX Bash · HTML · JavaScript · CSS · Machine learning · Data science · Data visualization · Knowledge translation

m Education

PhD, Industrial-Organizational Psychology

Sep. 2018-May 2023

University of Guelph

- Thesis title: Is Timing Everything? The Effects of Measurement Timing on the **Performance of Nonlinear Longitudinal Models**
- Conducted Monte Carlo simulation experiments using R on an Amazon Web Services (AWS) instance to evaluate the performance of structured latent growth curve models under several conditions
- My thesis can be viewed here

MSc, Psychology

Sep. 2016-June 2018

McMaster University

- Thesis title: Do the Benefits of Retrieval Practice Remain Under Stress?
- Used Python to design memory experiments and used R to analyze data.

Honours BSc, Psychology, Neuroscience & Behaviour McMaster University

Sep. 2012-June 2016

(E) Employment

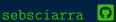
Teaching Assistant

Sep. 2018-May 2023

University of Guelph

- Created R scripts for assignments and taught labs for the following courses in measurement and statistics:
 - PSYC 3290 (Conducting Statistical Analyses in Psychology)
 - PSYC 3250 (Psychological Measurement)
 - PSYC 6060 (Research Design and Statistics)
 - PSYC 6380 (Psychological Applications of Multivariate Analysis)
- Taught a variety of topics in statistics (e.g., regression with continuous and categorical [i.e., ANOVA] variables, p values, p hacking, effect sizes, factor analysis, latent variable modelling, etc.)

sebastiansciarra.com





Data Science Projects

cobaltResume*

May 2023

R Package

- Created an R package for generating résumés and cover letters within RStudio
- ETEX code was used to specify a styling template that draws inspiration from the cobalt

^{*}clickable hyperlink to the corresponding repository on my GitHub

theme in the RStudio IDE

 R functions were created to easily generate résumé entries and merge résumés and cover letters into one PDF file

sebastiansciarra.com*

Mar. 2023

Personal website

- Used HTML, JavaScript, and CSS to create a personal website for writing blog posts
- Blog posts focus on statistics, machine learning, and coding by explaining technical details, providing demonstrations, and conducting simulation experiments
- Blog posts use code from a variety of language to explain content. As an example, my post titled "Coding and Visualizing the Expectation-Maximization Algorithm" used R, Python, and CSS code

guelphdown* Mar. 2023

R Package

- Created an R package for generating theses according to the University of Guelph formatting requirements
- LATEX code was created to specify a template, which included different formattings for the preamble, body, refences, and appendices
- An example of the formatting can be seen in my thesis

nonlinSimsAnalysis*

March 2022

R Package

 Created an R package that contained functions for automating the cleaning, analysis, and visualization of large data sets for my doctoral dissertation (e.g., 40 000+ rows)

nonlinSims* Jan. 2022

R Package

- Created an R package for simulation experiments in my doctoral dissertation
- Package allows the performance of structured latent growth curve models to be evaluated under several different conditions

Learning SQL* Mar. 2021

Skill learning

- Went through 16 of 18 chapters from Alan Beaulieu's Learning SQL
- Topics include filtering, querying multiple tables, sets, grouping and aggregates, subqueries, joins, transactions etc.

Certifications

DataCamp courses

June 2018-Aug. 2020

Skill learning

Completed 35 courses ranging from data visualization and writing functions to machine learning topics such as tree-based models and support vector machines. For a full list of the courses, see the relevant section on my LinkedIn here

<u>Skills</u>

R · SQL · Python · LaTeX ·

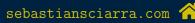
Bash · HTML · JavaScript ·

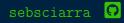
CSS · Machine learning · Data

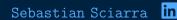
science · Data visualization ·

Knowledge translation

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 $^{^\}star$ clickable hyperlink to the corresponding repository on my GitHub