

# DANIELLE NAVARRO

I am a data scientist, an academic, an R developer, a cognitive scientist, and a generative artist. My scientific work focuses on human learning and reasoning, and statistical methods in the behavioural sciences. I build tools and teaching resources to assist R data analysts, communicated across multiple platforms.

## EDUCATION

2003 • **University of Adelaide**  
Ph.D. in Psychology

## EMPLOYMENT

2016 | 2021 • **Associate Professor**  
University of New South Wales (Sydney, Australia)

- Project and team management
- Design, conduct, and analyse behavioural experiments
- Communicate results in reports, books, papers, and talks
- Develop teaching material and research software
- Teach technical classes to small and large groups
- Successfully write grant/tender proposals for funding
- Recruit, supervise, and lead a team of skilled professionals
- Organise conferences and events

2013 | 2015 • **Associate Professor**  
University of Adelaide (Adelaide, Australia)

## BOOKS

2022 • **ggplot2: Elegant Graphics for Data Analysis (3rd ed)**  
Updated edition of the classic book on data visualisation with ggplot2 (coauthors: Hadley Wickham, Thomas Lin Pedersen)  
[ggplot2-book.org](http://ggplot2-book.org)

2015 • **Learning Statistics with R**  
Award winning open access textbook teaching introductory statistics and R programming to novices  
[learningstatisticswithr.com](http://learningstatisticswithr.com)

## TALKS

2020 • **Toward a grammar of psychological experiments**  
Invited talk, RStudio conference (San Francisco, California)  
[talks.djnavarro.net/rstudioconf2020](https://talks.djnavarro.net/rstudioconf2020)

2019 • **Science, statistics and the problem of pretty good inference**  
Invited talk, open science workshop (Aarhus, Denmark)  
[talks.djnavarro.net/scistat2019](https://talks.djnavarro.net/scistat2019)

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## PROGRAMMING

R / tidyverse / Shiny  
HTML / CSS / javascript  
git / GitHub  
SQLite  
C++  
Matlab / Octave  
Python

## DATA ANALYSIS

Data visualisation (e.g., ggplot2)  
Linear models (inc. GLM, GLMM)  
Factor analysis, MDS, PCA  
Bayesian data analysis (e.g., Stan)  
CART, random forests  
Cognitive modelling

## LITERATE CODING

LaTeX  
R markdown  
blogdown / bookdown  
xaringan slides  
hugo themes  
flexdashboards

2018

- **R for psychological science**  
Keynote talk, useR!2018 conference (Brisbane, Australia)  
■ [talks.djnavarro.net/user2018](https://talks.djnavarro.net/user2018)

## TRAINING AND TEACHING SKILLS

2021

- **Data visualisation**  
University subject providing an introduction to data visualisation using the R statistical programming language  
[data-vis-2021.djnavarro.net](https://data-vis-2021.djnavarro.net)

2020

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2021

- **Introduction to R**  
Online workshops, youtube videos, and slide decks covering a variety of topics in R, aimed at a broad audience. Designed to provide remote learning solutions during the pandemic  
[slides.djnavarro.net](https://slides.djnavarro.net)

2020

- **Certified tidyverse trainer**  
Official RStudio certification for tidyverse instructors  
[education.rstudio.com/trainers](https://education.rstudio.com/trainers)

2016

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2019

- **Minds and machines**  
University course discussing the relationship between human cognition and machine learning, introducing students to both  
[minds-machines-4103.djnavarro.net](https://minds-machines-4103.djnavarro.net)

## COMMUNITY ROLES

2020

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2021

- **Science**  
Board of Reviewing Editors  
[science.org/journal/science](https://science.org/journal/science)

2018

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2021

- **R-Ladies Sydney**  
Cofounder and organiser  
[rldiessydney.org](https://rldiessydney.org)

## TECHNICAL PAPERS

2021

- **If mathematical psychology did not exist we might need to invent it: A comment on theory building in psychology**  
Perspectives on Psychological Science  
[psyarxiv.com/ygbjp](https://psyarxiv.com/ygbjp)

2019

- **Between the devil and the deep blue sea: Tensions between scientific judgement and statistical model selection**  
Computational Brain and Behavior  
[psyarxiv.com/39q8y](https://psyarxiv.com/39q8y)

- **>100 scientific papers, ~4700 citations, h-index: 35**  
[scholar.djnavarro.net](https://scholar.djnavarro.net)

## R PACKAGES

- [bs4cards.djnavarro.net](https://bs4cards.djnavarro.net)  
Insert Bootstrap 4 cards into R markdown documents to create thumbnail grids and links
- [jaysire.djnavarro.net](https://jaysire.djnavarro.net)  
Write behavioural experiments in R that build to javascript using the jsPsych library
- [lsr.djnavarro.net](https://lsr.djnavarro.net)  
Wrapper functions to assist with teaching introductory stats in R
- [flametree.djnavarro.net](https://flametree.djnavarro.net)  
Package for generative art in R

## ART AND DESIGN

- [art.djnavarro.net](https://art.djnavarro.net)  
Generative art portfolio
- [djnavarro.net/hugo-diziet](https://djnavarro.net/hugo-diziet)  
Hugo theme suitable for graphic design websites generated in R

*Résumé generated in R  
with ♥ and [pagedown](#)*

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