

Florian Rohart

PhD in Applied Statistics

10Y Experienced Statistician

Expert in Machine Learning and big data

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Highly efficient statistician looking into capitalising on his organisational and technical skills to create a meaningful impact. Able to take innovative initiative to lead projects to completion within timeline and budget with deliverables that are understandable by non-specialists

Core Skills

- **Successfully managed and led to completion all initiated projects**; 12 peer-reviewed scientific publications, created 5 R-packages, selected speaker at 9 international conferences (Australasia, Europe)
- **Provide analytical insights from data** through a wide range of statistical methods: AI/ML approaches (e.g. linear regression, logistic regression, PCA, K-means, Partial Least Squares, SVM, Random Forests, LDA, Lasso), supervised and unsupervised learning, predictive models, dimension reduction, variable selection, ...
- R expert, High-Performance Computing, bash, git, L^AT_EX, learning Python

Professional experience

Senior Research Fellow - *Institute for Molecular Bioscience, The University of Queensland* 2017 – 2019

- **Led the development of a new statistical link** between human DNA and e.g. schizophrenia
- **Managed a team of 9 lecturers** while being course-coordinator, lecturer and tutor. **Created a MSc-course** 'Statistical Analysis of Genetic Data' - renewed thanks to students' feedback: 'Encouraged us to think about the techniques we were using instead of blindly applying them', 'A fantastic lecturer. Engaging and very approachable - he had an easy rapport with the students.'
- **Provided technical guidance** to members of the team and the institute

Senior Research Fellow - *The University of Queensland Diamantina Institute* 2015 – 2017

- **Led the development of innovative statistical methods** for data optimisation: to reduce costs and limit data obsolescence - promulgation through a R-package, `mixOmics` 60k downloads in 2018
- **Delivered analyses reports** with relevant visualisations to enable understanding by non-specialists; data scientist consultant
- **Invited as a speaker and tutor** at international statistical courses for technical experts and beginners; machine learning, supervised learning, predictive models and dimension reduction
- **Successfully co-supervised** 4 students (MSc and Hons)

Post-doctoral Research Fellow 2013 – 2015

Australian Institute for Bioengineering and Nanotechnology, The University of Queensland

- **Created the 'Rohart MSC test'**, used internationally online - identification of a set of markers that improved the recognition of stem cells with potential for clinical use with more than 97% accuracy compared to the existing 80%, via **proactive development** of a new innovative machine learning approach - R-package - approach also used on another project and led to a pending patent

Education

PhD in Applied Statistics - *University of Toulouse, France* 2012

MSc in Applied Mathematics 2009

Major in Applied Statistics, with distinction, University of Toulouse, France

Bachelor degree in Mathematics, computer sciences and applications 2007

Major in Mathematics, with distinction, Top 10 students, University of Toulouse, France

Prize/Patent

- Top 2 best Performers of the "2016 sbv IMPROVER Computational Challenge" – 23 international teams
- Patent pending following a research outcome on Liver Cancer in humans