

# Julien Hernandez Lallement, PhD

### DATA SCIENTIST, DATA MANAGER, COGNITIVE NEUROSCIENTIST

#### MiniBio:

Data scientist with 10 years experience in data analysis, modelling and statistics, as well as visualization and storytelling.

Researcher & scientist by nature, I combine my expertise in data with my extensive project management experience to deliver interpretable, scaled and insightful data products.

Contact: (+49) 178 80 26 978 julien.hernandez. lallement@posteo.net Birth: 28/02/1986









# **WORK EXPERIENCE**

# **Principal Data Scientist**

Now Orsay, Germany.

- Evaluate demands from stakeholders to evaluate need and translate to suitable data product.
- Develop, implement, test and deploy **Machine Learning models** at large scale.

Ex: developed purchase and churn models that increased ROI by 49% through retargeting. Implementation on Google Cloud and integrated within internal BI universe.

Provide **data visualization tools** and dashboard to enable informed and data driven decisions.

Ex: developed series of Tableau dashboard to monitor marketing channels. Deployed and automatized the update of the data on a daily basis through Google Cloud based code.

**Problem solver** on a daily basis, providing non ML solutions.

Ex: marketing campaign automatization (SalesForce compatible), customer selection, data pipes

- Workshop organizer to disseminate Python and Machine Learning horizontally and vertically within the company.
- First initiator of **cloud-based activities**, and main actor in BI-Cloud process migration.
- Act as active link between tech and non-tech stakeholders and aligned participants over a common goal.

#### **Aug 2016 Behavioral Datascientist / Neuroscientist**

**Sep 2019** Netherlands Institute for Neuroscience, The Netherlands.

- European project coordinator. Founded a technique to assess neural networks of empathy.
- Provided day-to-day data extraction & analysis (Python, MatLab) & modeling (R & Rstudio).
- Established **analysis pipelines** for different data streams.
- Performed **meta-analytic processing** & analysis on large online databases.
- Performed parametric and non-parametric statistics (frequentist; SPSS & Bayesian statistics; JASP).
- Worked with Machine Learning classifiers (JABAA) and DeepLearning approaches (DeepSqueak)
- Successfully managed schedule, cost, scope and communication over a 3 years period.
- Presented at **international conferences** and organized symposiums together with worldwide experts.
- **Managed and guided** a team of students (5/6 members).

#### Oct 2011 **Doctorate - Psychology & Neuroscience**

**Apr 2016** Comparative Psychology Lab, Germany.

- Developed MatLab scripts (bootstrap, permutation, binomial test) to study decision making.
- Managed and guided > 10 students.
- Presented and discussed data in weekly scientific meetings and international scientific conferences.
- Held weekly lectures over a period of 3 years (audience 10-20 people).

#### Oct 2010 **Data Analyst - NeuroImaging**

Life & Brain Institute, Germany Jun 2011

- Proposed & led a project about valuation of monetary gains in economic decisions.
- Developed neuroimaging experiment to investigating donation behavior.
- Elaborated the research case and convinced external parties for funding.



# HARD SKILLS

### Data Science, Analysis and Modeling

I am an expert in most ML algorithms (Logistic and Linear Regressions & variations, SVM, Decision Trees & Ensemble variations, KMeans, KNN) from mathematical background to business implementation. While familiar with other more complex algorithms, experience showed me that, when paired with common sense & heuristics, the aforementioned equations can already do wonders in 95% of the cases.

Below, a list of tools I use on a daily basis for different scope:

**Programming:** Python, SQL, MatLab, R, Pascal

Data processing: SQL, Python (numpy, pandas, dask), R (dyplr, tidyverse).Data exploration: Python (plotnine, matplotlib, seaborn), R (ggplot2)

**Data modeling:** Python (SciKit Learn, Keras). Bayesian modeling (RStudio/rstan, PyMC3).

Statistics: Frequentist (parametric & non-parametric test; SPSS, SciPy), Bayesian (JASP, PyMC3)

**Data Management:** PyCharm, Git, Python (pyscaffold)

#### **Project & Process Management**

PMP Certified Project Manager (>12.000h of project management audited)

**SCRUM Master Certified** (SCRUM Alliance)

Lean Process Management (Six Sigma Yellow Belt certificate)

### **Reporting & Presentation**

10 publications, cited > 250 times

Held > 50 talks, with audience between [10-100] people

#### **Teaching**

Course Coordinator @ Amsterdam; weekly 2h seminars for 3 years; Workshop Organiser.

| Languages |            | SPOKEN      | READ | WRITTEN                      |
|-----------|------------|-------------|------|------------------------------|
|           | ■ ■ F      | R           |      |                              |
|           | 搬          | S           |      | Native language              |
|           | <b>≥</b> E | N .         |      | Full Profess. Proficiency    |
|           |            | DE <b>E</b> |      | Good Profess. Proficiency    |
|           |            |             |      | Limited Profess. Proficiency |
|           |            | NL          |      |                              |



# SOFT SKILLS

- Adaptability: Integrated in work environments across 5 countries
- Leadership: Articulate the projects' vision, align stakeholders, and maximize their potential
- Communication: Managed projects involving > 5 layers of hierarchy
- Networking: Reached out and established collaborations with world-wide experts
- **Curiosity:** Visited > 60 countries



## **EDUCATION**

- Master Neuroscience University Bordeaux II, France, 2010
- Bachelor Cellular Physiology & Behavior. University Bordeaux I, France, 2008



# AWARDS AND DISTINCTIONS

Marie Curie European Fellowship
Machine Learning Workshop
Netherlands Institute for Neuroscience Funds

• Meta-Analysis Workshop 6.000 €