

# Julien Hernandez Lallement, PhD

#### DATA SCIENTIST, DATA MANAGER, COGNITIVE NEUROSCIENTIST

#### MiniBio:

Data scientist with 10 years experience in data analysis, modeling 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.

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





# **WORK EXPERIENCES**

## Oct 2019 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: used TF-IDF to assess text tendencies in marketing communications and propose new strategies.
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: Tableau dashboards monitoring KPIs. Deployed and automatized the data update through GCP-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

Sept 2019 Netherlands Institute for Neuroscience, The Netherlands.

- Provided day-to-day data extraction & analysis (Python, MatLab) & modeling (R & Rstudio).
- European project coordinator. Founded a technique to assess neural networks of empathy.
- 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; held weekly lectures over a period of 3 years (audience 10-20 people).
- Presented and discussed data in weekly scientific meetings and international scientific conferences.
- Published PhD Thesis.

# Oct 2010 Data Analyst - NeuroImaging

Jun 2011 Life & Brain Institute, Germany

- 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 specialized in classic 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 business cases.

**Cloud Engineering:** Google Cloud Platform (see <u>here</u> and <u>here</u> for use cases)

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

SQL, Python (numpy, pandas, dask), R (dyplr, tidyverse). Data processing:

Data visualization: Python (plotnine, matplotlib, seaborn), Tableau

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

**Data Science writer on Medium** 

#### **Teaching**

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

#### Languages





# 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: <u>Visited > 60 countries</u>



# **EDUCATION**

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



# AWARDS AND DISTINCTIONS

Marie Curie European Fellowship 165.000 € 10.000 € Machine Learning Workshop 9.000 €

Netherlands Institute for Neuroscience Funds

6.000 € Meta-Analysis Workshop