

# Benoît Paris

*Machine Learning Engineer - Explainability Specialist*



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## Projects & Education

### Explicable.AI.

2019

Intuitive exploratory environment based on the knowledge contained within a machine learning model  
Currently being developed  
<https://explicable.ai>

### Explainable Machine Learning Challenge, FICO-Google.

Oct 2018

- Improved standard RuleFit algorithm to select shorter rules
  - Discovered a bug in a Python implementation of RuleFit and patched it
  - Tech: Scikit-Learn, Python, t-SNE, Lasso, Jupyter
- <https://github.com/benoitparis/explainable-challenge>

### MSc Engineering, Ecole Centrale de Lille, (Leading Engineering School in France, PEng level).

2006–2009

Computer science & e-commerce

## Experience

### Machine Learning Engineer, Paris, France.

2017–Present

Independent Contractor

*PSA, Direction Marketing Citroën/DS*

- Implemented treeinterpreter (precursor to Tree SHAP) for Spark/Scala. In production: currently helps sales teams customize their communication with qualified leads, enhancing their conversion rate by up to 51% in some cases. Open Source: <https://github.com/benoitparis/InterpretableRandomForest>
- Successfully designed, built and operated a predictive marketing pipeline, complete with performance metrics and an application to display the predictions

### Data Management Engineer, Clémence Consulting, Paris, France.

2012–Present

*PSA, Direction Marketing Citroën/DS*

*PSA, PSA Retail – VO*

*La Ligue contre le cancer*

*Dalkia, Direction Financière*

- Designed a batching architecture for multicanal marketing campaigns, admin and back office applications, BI environment
- Enhanced flexibility, response time of large workloads using Spark
- Carried out DBA roles, data quality monitoring, analysis, data wrangling, data enrichment, ETL pipelines, Spark jobs
- Deployed an entity recognition method for referential data matching
- Delivered a Proof of Concept for using Semi-supervised clustering for data cleaning

**Founder, OmniFriend, Paris, France.**

**2011–2012**

OmniFriend helps you discover relevant services for the website you are currently visiting

- Strategic planning
- Community management
- Full-stack development: browser extension, design, front/middle/back
- Lean startup product development
- Business development, partnerships, fundraising start

**E-commerce Engineer, ECOCEA, Paris, France.**

**2010–2011**

- Backend development, WebSphere Commerce
- Project management, analytics: Omniture, Google web analytics

**Market Analyst Intern, Orange Business Services, Dubaï, U.A.E.**

**2009**

Delivered a Market Sizing analysis of the "Solution for Operators" business line for the Middle East and Africa region. Solution for Operators targets incumbent operators as well as *de facto* operators, such as real estate developers or conglomerates.

## Languages

**French:** Native level

**English:** Professional level - CAE

*International environment*

**Spanish:** High School level

## Tech

**Machine Learning Internals:** RuleFit, Random Forest, treeinterpreter, Embeddings

**Machine Learning:** SHAP, Word2Vec, PCA, t-SNE, UMAP, LSH, ROC

**Frameworks:** Scikit-Learn, Spark, Flink, Spring

**Environments:** Jupyter, Sagemaker, Weka, Databricks

**Databases:** Postgres, MySQL, Oracle, Firebird, BigQuery, Hive, Spark SQL, Flink SQL, Distributed Stream Processing

**Tools:** AWS, Linux, Maven, Git

**Languages:** Python, Java, Scala, CAML, Elm, Javascript

**UI:** Primefaces, ReactJS, d3.js, THREE.js

## Interests

Windsurf, Snowboard, (Spectating) Rhetorical competitions