

# Nicolas Brichler

Data Scientist  
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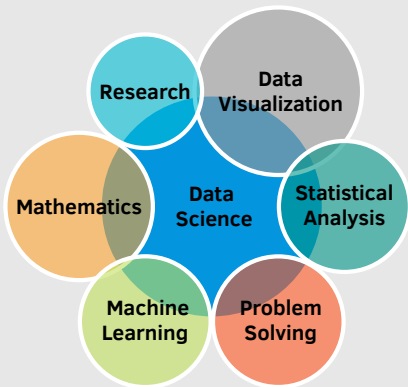
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## Skills

### Overview



### Programming

Python(Keras, scikit, TF) • Matlab

R • SQL • JS • Java • GCP • Latex

C • C++ • HTML • node.js

### Languages

**French:** Native

**English:** Fluent (990 TOEIC score)

**German:** Intermediate

## Interests

**AI** - Natural Language Processing, Object Detection, Robotization

**General** - International News, Finance, Cryptocurrencies, Electronic music

**Travelling** - Been in over 20 countries (Mexico, Egypt, Hungary, Thailand...)

**Football** - Played Central Defense in Polytechnique student team, still play casually

## Education

2013 - 2017 **MSc., Engineering** (GPA: 3.66/4.0)

École polytechnique, PARIS

Courses in Statistics, Optimization, Machine Learning, Operational Research, Economics and Computer Science in France leading Science and Engineering University. **Project works:**

- Modelization of a production site supply chain and Stock Optimization with **SNECMA (SAFRAN)**.
- Modelization of electricity prices for strategic investment with **EDF**.

2016 - 2017 **MSc., Statistics and Machine Learning**

Université Paris-Sud, PARIS

One of France's most demanding mathematics master program. High- Dimensional Statistics, Time Series Analysis (ARIMA, GARCH), Stochastic Calculus, Monte Carlo method, Statistic modeling.

2011 - 2013 **Classes Préparatoires**

Collège Stanislas, PARIS

two-year Preparations in mathematics and physics leading to highly competitive entrance exams for the top French engineering schools.

## Experience

Feb 2018 - **Data Scientist**

Solvay, SINGAPORE

Present

In the Big Data & Analytics team, I work on various projects in an agile way to consolidate Solvay in the digital era

- NLP: automatic translation and classification of helpdesk tickets to reduce response time and improve user experience;
- Object Detection: detection of plant workers not wearing safety helmets to prevent accidents
- Supply Chain Optimization: Resource Allocation;
- Plant Output Forecast and Profit Maximization;
- Web Scraping: Monitoring and support for the group activities.

May 2017 - **Machine Learning Researcher**

National Physical Laboratory, LONDON

Sept 2017

Modelling of natural risks (landslides, cracking, leakage...) and assessment of the risk profile of the geographical areas of London in order to price home insurances. Creation of a method and development of a Matlab module for joint online modelling of satellite image data (ground movement measurements) and insurance claims using probabilistic and machine learning techniques:

- Estimation of the intensity of an insurance claims as a Poisson point process in London.
- Handling of the high-dimensional dataset from the satellite (noise removal, LASSO regression).

March 2016 - **Research Intern**

Orange, PARIS

Aug 2016

Stochastic modelling of street networks in order to statistically assess fibre optics wiring costs and users eligibility. Implementation and creation of a "Manhattan" district profile to improve Orange's tool to support strategic decision-making (choice of cities or districts in which to invest).

June 2015 - **Risk Analyst**

Le Conservateur, PARIS

Sept 2015

Risk assessment required by **Solvency II** in a team of three actuaries: population analysis and evaluation of risks linked to ageing and arbitrage. Compliance work and operational risks: realisation and implementation of a detection and correction tool for billing mistakes.

Oct 2013 - **Volunteer Science Teacher**

Lycée Polyvalent, TOULOUSE

Apr 2014

Tutored over thirty high school students with learning difficulties in mathematics and science lessons and coached highly motivated students who wanted to pursue further education in STEM.

Sept 2013 **Military Cadet training**

Initial Military Training at La Courtine Camp.