

Pierre Cottais

Rennes 35000 FRANCE · 27 years old · pierre.cottais@orange.fr

CAREER OBJECTIVE

Data Scientist in Ecology and Biology with strong skills in data processing and analysis, passionate about developing web applications and guides to share knowledge and communicate information. Experienced in GIS processing, R programming, and Git version control.

EDUCATION

Sept 2021 – Sept 2022 · **Master's Degree** at l'Institut Agro Rennes-Angers, Rennes
Applied mathematics, statistics – Data Science for Biology

Sept 2020 – Sept 2021 · **Bachelor's Degree** at Université Rennes 2, Rennes
Mathematics and Computer Science applied to Humanities and Social Sciences – Data Science

Sept 2019 – Sept 2020 · **Two-year University Degree** at IUT de Vannes, Vannes
Statistics and business intelligence

Sept 2017 – June 2018 · **First year of preparatory cycle to engineering cycle** at Polytech Angers, Angers
Maths-physics

PROFESSIONAL EXPERIENCE

RESEARCH ENGINEER – DATA ANALYST FOR DIGITAL AGRICULTURE

Mar 2025 – May 2026 · Fixed-term contract at IRISA (Inria), Rennes

Interdisciplinary joint research unit (UMR) on computer science and information technologies at Data and Knowledge Management department

Identify the response of livestock to heat stress through the analysis of temperature, behaviour and dairy production time series from sensors

- ▶ Statistical modelling and analysis with Python and R · Machine learning for time series · Version control with Git

RESEARCH ENGINEER – CITIZEN DATA ANALYST

Nov 2023 – August 2024 · Fixed-term contract at BEEP (Ifremer), Brest

Interdisciplinary joint research unit (UMR) on Biology and Ecology of Deep Sea (BEEP) at the Deep sea Lab

Build automated workflow to analyse data from Citizen Science platform *Ocean Spy* and its projects

- ▶ Statistical analysis with R · Scientific article writing ([Matabos et al., 2025](#)) · R package development · Version control with Git

RESEARCH ENGINEER – DATA SCIENTIST

Nov 2022 – July 2023 · Fixed-term contract at Dynafor (INRAE), Toulouse

Interdisciplinary joint research unit (UMR) on Dynamics and ecology of agri-forestry landscapes (Dynafor)

“Build optimized sample design to best measure the effects of land-use and climate changes on local breeding bird”

- ▶ Statistical modelling and theoretical analysis · Landscape simulation with complex geometries (point process) with R, QGIS and Fragstats

RESEARCH TRAINEE – DATA SCIENTIST

Nov 2022 – July 2023 · Internship at Dynafor (INRAE), Toulouse

Interdisciplinary joint research unit (UMR) on Dynamics and ecology of agri-forestry landscapes (Dynafor)

“Effects of integrative conservation measures on the dynamics of a tree-related microhabitat formation” (base work for article [Cottais et al., 2025](#))

- ▶ Statistical modelling (Bayesian inference, survival analysis, Markov chain) and data analysis with R · Data gathering in state-owned forest

HABITAT PROJECT MANAGER TRAINEE – DATA ANALYST

Nov 2022 – July 2023 · Internship at ADIL 31, Toulouse

Departmental housing information agency (ADIL), approved by the French Ministry of Housing

Development of a web app to enter, store and visualise data

- ▶ Data analysis with R and QGIS · Report writing for public authority · Data gathering from collective ownerships

PROJECT MANAGER ASSISTANT – DATA ANALYST

Jul 2019 – Aug 2019 & Dec 2019 – Jan 2020 · Two fixed-term contracts at Kantar France, Paris

Development of an intern web application to enter and store data and to visualise basic indicators

PROJECT MANAGER ASSISTANT TRAINEE – DATA ANALYST

Apr 2019 – Jun 2019 · Fixed-term contract at Kantar France, Paris

Comparative analysis of European databases

- ▶ Data processing MS Excel, MS Access and R

SKILLS

STATISTICS & DATA SCIENCE

- Descriptive statistics: data visualisation, factorial analysis
- Statistical modelling: regressions, time series, hypothesis testing, classifications, Bayesian inference
- Machine learning: random forests, neuronal networks, deep learning on image classification and text mining
- Languages & software: R, Python, SAS, VBA, Excel, Tableau

DATA MANAGEMENT · WEB · REPRODUCIBILITY

- Relational and non-relational database management system: Oracle, MySQL, Access, MongoDB, XML, neo4j
- Request languages: SQL, C++ (MongoDB), Cypher (neo4j), XPath (XML)
- Web structure and scrapping languages: HTML, CSS, PHP, JavaScript, R (Shiny), Python (Beautiful Soup)
- Version control: Git (GitHub, GitLab)

LANGUAGES

French (native) · English (C1)

MISCELLANEOUS

Aug 2025 – Dec 2025 · Private lessons in R programming

Nov 2020 – April 2021 · Private lessons in mathematics (secondary school)

June 2018 – May 2019 · Student organisation (secretary/treasurer)