



Ricardo G. Sousa

PRINCIPAL SCIENTIST

Profile

I am an **accomplished Principal Scientist/Research Scientist** who is passionate about delivering value through data and AI/ML methods. I am a fan of innovative and disruptive technologies who is **eager to push boundaries**. Bringing forth a **proven track record** of managing and project coordination and, serving as a strong adviser, I easily **communicate and collaborate with stakeholders** who are laser-focused on critical pain points and eager to improve user experience through novel **AI/ML and computer vision-powered products**.

Employment History

Principal Data Scientist, FARFETCH, Porto, Portugal

MAY 2021 – PRESENT

- Project Manager and Coordinator of a **multinational and multi-million** worth project for multimodal conversational AI Agents.
- Performed **in-depth data validation on data from suppliers** like WeChat and WhatsApp across the world where the company operates; **Competitor landscape analysis** to support our growth model.
- **Creator** of the Conversational Commerce working stream; Strong adviser and architect for conversational ecosystems within FARFETCH.

Awards

- [Multimodal conversational AI Agents for the Online Fashion Marketplace](#) worth **2.3M €**

Tech Stack

- Python, PyTorch, Docker, CircleCI, nodejs, angular, Sphinx, C4, PlantUML, Milvus

Data Science Manager, FARFETCH, Porto, Portugal

MARCH 2019 – APRIL 2021

- In charge of managing the pillars' efforts toward segmentation and personalisation initiatives in the faceted search area. Our client segmentation resulted in an AB with a prospective uplift of **upmost USD \$14 million (web)** and **USD \$16 million (mobile)**.
- Product assistance and technical guidance to the Product and Engineering Manager to lay the groundwork for an innovative ranking platform; **Paved the way and mentored** the architectural group to reduce friction during design sprints meetings.
- Proposal and acceptance of a collaborative project of **EUR € 2.3 million** funded by the Portuguese government to build the first multimodal conversational AI agent.

Tech Stack

- Python, Docker, ElasticSearch, Jenkins, Octopus

Lead Data Scientist, FARFETCH, Porto, Portugal

FEBRUARY 2017 – FEBRUARY 2019

- **Led 2 teams** in charge of the FARFETCH listing pages, namely, search and faceted search. **Line of manager of 8 data scientists**.

Details

Porto

Portugal

<https://zcal.co/i/AihltkY5>

hire.ricardo@rsousa.co

NATIONALITY

Portuguese

Links

[Personal Website](#)

[GitHub](#)

[LinkedIn](#)

[Twitter](#)

Skills

Machine Learning

Leadership Skills

Agile Project Management

Languages

English

Portuguese

Hobbies

Swimming, Home-Automation, Gardening

- Advocate the need for advanced ML/AI pipelines to strengthen our services and tools. This resulted in the development of the **first ML/AI CI/CD pipeline** with automated tests.
- At least 15 studies were implemented in the second year on the job, with annual increases ranging from **£5 million to £7 million** each, with **60 percent overall success**.
- **2 papers** about our semantic search and visual information extraction techniques were accepted in a tier 1 international conference workshop (KDD '18).
- Supervised, mentored, and sponsored the formation of a team for the first FARFETCH chatbot; Business operations optimisation to accelerate Customer Service KPIs through the introduction of a new ticket categorisation service, which resulted in a **28 percent reduction in average time of reply**.
- **Promoter of university collaboration and synergies** for talent empowerment and the establishment of think-tank labs. Enrolment of two students in FARFETCH resulted in 1) improvement of a DYM methodology with a **potential increase in GMV of £ 0.33 million per year** and 2) **automation of product catalogue categorisation**.

Tech Stack

- Python, Docker, ElasticSearch, Jenkins, Octopus

Data Scientist, FARFETCH, Porto, Portugal

OCTOBER 2015 – JANUARY 2017

- Co-promoter for AB Testing in our listing pages. Each experiment projected an annual increase ranging from **£500 thousand to £5 million**.
- Contributed with established AI/ML solutions for search (ngram based), faceted (point-wise approaches) and visual search (LBP/texture based).
- Champion for **new methods of working** in our product teams by introducing the concept of co-leadership (engineering and data science).

Tech Stack

- Python, Docker, Jenkins, Octopus

PostDoctoral Researcher, INEB, Porto

MARCH 2014 – SEPTEMBER 2015

Developed new learning algorithms for Transfer Learning (TL). TL has piqued the interest of the Machine Learning community since it paves the way for the development of sophisticated learning models that can be easily customised to a wide range of applications.

Education

PhD, Universidade do Porto, Porto, Portugal

2008 – 2012

- Author of **4 papers**, the majority of which contribute to a better aesthetic assessment of breast cancer surgical interventions.
- Fundamental Machine Learning specialising in "Ordinal Learning".

MSc, Universidade do Porto, Porto, Portugal

2007 – 2008

- Author of **1 paper** for the detection, recognition and extraction of tissue lesions.
- Computer Vision applied to the automatic aesthetic assessment of breast cancer.

References

References available upon request

Extra-curricular activities

President, Parents' and Guardians' Association, Vila Nova de Gaia

DECEMBER 2021 – SEPTEMBER 2022

- **Founder and president** of a non-profit organisation that promotes parental and guardian education in order to raise awareness of the value of education, training, and continual growth in order to prevent school abandonment. Activities to enhance social inclusion and participation in school activities.

Internships

Visiting Student, Universidade Federal Ceara, Fortaleza, Ceara, Brazil

FEBRUARY 2011 – MAY 2011

Courses

Artificial Intelligence, Stanford University/MOOC