

Master Thesis Project - R&D Field Intelligence

Your tasks

Can you imagine why it is important for a Tire manufacturer to know the expected mileage of their tires?

Although state-of-the-art methods and techniques to theoretically estimate these values based on the tire's characteristics do exist their performance in the field it is highly influenced by many more factors such as the application as well as the geography they are used for, their position within the vehicle, the skills of the driver and many more.

To verify what is their field wear performance, to benchmark new tires recipes against old or competitor's equivalent tires and early detect potential defects during development, several Field Tests are commissioned each year to Global Tire Testing. As you can imagine these tests are expensive and could only be a subset of all the "wished" tests. Nevertheless, due to their importance they are performed, and they are a rich source of data which currently supply the right answer only to whoever is commissioning the test.

The aim of this initiative is to unleash the power of this Tabular data with the help of Large Language Models (LLMs) together with traditional Machine Learning approaches to be able to generalize to contractual configurations not contained in the historical data and be able to provide a reliable KPIs for new tire products, vehicles, customers, and regions.

Besides tire testing, also complaints prediction, compound recipe generation and product portfolio consolidation could benefit from the approach.

Your profile

- Training Area in Computer Science, Artificial Intelligence, Data Science or similar;
- Good knowledge of Python (pandas, scikitlearn, numpy) and Linux;
- Basic knowledge of some AWS services (EC2, S3 buckets);
- Basic knowledge on data engineering;
- Basic understanding of code versioning (e.g. Git);
- Basic knowledge on Machine Learning;
- Airflow is a plus.

Our offer

Our offer:

- Integration in a challenging and international work environment;
- Collaborative working style;



Job ID
REF90793V

Field of work
Information Technology

Location
Lousado

Legal Entity
**Continental Solution Center
Portugal, Unipessoal, LDA.**

- Learning opportunities for professional development.

We are committed to fostering a workplace where everyone feels safe, respected, and valued. All kind of applications are welcome.

Please note:

- Mandatory to be studying in a Portuguese University, ready to start Master Thesis Project.
- To initiate on the 2nd Semester of 2025-2026.

Ready to drive with Continental? Take the first step and fill in the online application.

About us

Continental is a leading tire manufacturer and industry specialist. Founded in 1871, the company generated sales of €39.7 billion in 2024 and currently employs around 95,000 people in 54 countries and markets.

Tire solutions from the Tires group sector make mobility safer, smarter, and more sustainable. Its premium portfolio encompasses car, truck, bus, two-wheel, and specialty tires as well as smart solutions and services for fleets and tire retailers. Continental has been delivering top performance for more than 150 years and is one of the world's largest tire manufacturers. In fiscal 2024, the Tires group sector generated sales of 13.9 billion euros. Continental's tire division employs more than 57,000 people worldwide and has 20 production and 16 development sites.