

## Junior Machine Learning Engineer (Geospatial experience)

### Description

### Company Description

We are champions of rail, inspired to build a greener, more sustainable future of travel. Our purpose is our momentum. It makes us feel good because we know we're doing good. As we lead the way to a greener future, we do it together. We're all about connections – with each other, with our customers and with the world. Just as our platform brings the world together, it's our ambition that connects us. We motivate each other to go beyond our limits, to experiment, to fail and to always grow.

With over 110 million visits every month to our platform and £4.3 billion in net ticket sales, we're always innovating and making moves towards our final destination — a world where travel is as simple, seamless, and affordable as it should be.

And we couldn't do any of it without our incredible people driving us forward. Today, we're a FTSE 250 company that's proudly home to more than 1000 Trainliners from over 60 nationalities across offices in London, Paris, Barcelona, Milan, Edinburgh, Berlin, Madrid and Brussels. It's this diversity that energises us and makes us stronger, helping us to achieve amazing things.

With our sights firmly set on further European growth, there is no better time to jump on board this high-speed train and be part of our continued success.

Great journeys start with Trainline.

### Job Description

#### Introducing Machine Learning at Trainline

Machine Learning is at the heart of Trainline's mission to help millions of people make daily sustainable travel choices. For instance, our ML models provide state-of-the-art search capabilities on our apps, find the lowest price for millions of customers, improve user experience with generative AI and power our digital marketing capabilities, amongst other things. For instance, our ML models provide state-of-the-art search capabilities on our apps, find the cheapest price for millions of customers, improve user experience with generative AI and power our digital marketing capabilities, amongst other things. For instance, our ML models provide state of the art search capabilities on our apps, find the cheapest price for millions of customers, improve user experience with generative AI and power our digital marketing capabilities amongst other things. Our embedded machine learning teams responsible for delivering these products on the full end-to-end delivery lifecycle from ideation to production and collaborate closely with the wider business to help develop the understanding and impact of machine learning and AI across all areas of Trainline.

We are looking for a geospatial data scientist to play a key role in an exciting new team within Trainline that improves the customer experience for rail passengers with accurate train tracking and mapping tools. This role will involve innovating and

### Hiring organization

Candidate-1st

### Employment Type

Full-time

### Beginning of employment

asap

### Job Location

London, United Kingdom

### Working Hours

40

### Base Salary

euro GBP 79K - 129K \*

### Date posted

June 8, 2024

developing this brand-new technology, as well as working on the maintenance, monitoring, and reliability of the system and processes.

In addition, you will collaborate with an exciting new research and development team to bring new innovations to the market. This will also involve building proof-of-concept prototypes testing their viability, as well as develop new algorithms that will be used in real-world products, benefiting millions of passengers.

As a part of trainline you will not only receive a competitive [salary](#) and benefits, but you'll be joining an environment where your development is a top priority. You will have the opportunity to work with fellow ML enthusiasts on large scale production systems, delivering highly impactful products that make a difference to our millions of users.

### **As a Machine Learning Engineer at Trainline, you will... ??**

- Improve the passenger experience by developing data engineering pipelines that improve train tracking.
- Work as part of the research and development team to test the viability of new products and services.
- Work as part of a multi-discipline team that includes data scientists and geospatial engineers to ship new features and products.
- Create tools, frameworks and processes that accelerate the speed, efficiency, maintenance, and reliability of services.

### **Qualifications**

#### **We'd love to hear from you...??**

- Have an advanced degree in mathematics, physics, statistics or a similar quantitative discipline.
- Are experienced in designing machine learning algorithms, using processes such as feature engineering, model selection and hyperparameter tuning.
- Are proficient with Python data science libraries such as Jupyter Notebooks, Numpy, Pandas, Tensorflow, and SciKit Learn.
- Have extensive experience in using mathematical models and statistics to extract meaning from data.
- Are confident in visualising data and communicating insights to stakeholders who are from a range of disciplines.
- You have experience with geospatial analysis, using, for example network graphs and tools like QGIS and/or ArcGIS.

#### **Nice to have ??**

- Experience with SQL using databases such as MySQL, PostgreSQL, Athena, Redshift.
- You're familiar with cloud-based platforms like AWS and CI/CD processes using tools like GitHub Actions.
- Are experience with working with a range of estimation algorithms, such as those used in navigation and digital signal processing.
- Understanding of NLP algorithms and techniques
- Experience with Large Language Models (fine tuning, RAG, agents)

### **Additional Information**

#### **Why should you jump on board?**

We pay special attention to learning and development and organise quarterly company learning days as well as offering a learning budget that can be put towards resources of your choice. We will cover the costs of your professional subscriptions and give you access to our very own learning platform.

At Trainline, we care about the wellness of our employees. We host puppy therapy sessions, in-office yoga and run Mental Health First Aider training courses as well as having an Employee Assistance Program as one of our many company benefits.

We regularly throw fun social events such as pub quizzes, karaoke nights and our large-scale Summer and Winter Festivals every year. Additionally, we love hosting meetups in our amazing event spaces and having the opportunity to support internal and external community groups.

We also hold companywide hackathons and our annual Trainline Tech Summit, which provides Trainliners with an opportunity to stand up and share their story, learnings, or new skills with their colleagues in a safe environment.

### **Our flexi-first approach**

We believe in the importance of a healthy work-life balance and the value of a flexible workforce. Our flexi-first approach outlines our commitment to a hybrid way of working and our expectations of Trainliners. A key part of what makes Trainline special is our people and the value we get from the buzz and energy of our workplaces, and that's why we're proud to offer the best of both worlds. In practice this means in-office attendance at least 40% of the time over a 12-week period for all Trainliners. These in-office days are typically team led to help us connect, collaborate and create together.

### **Our Values**

- **Think Big** – We're building the future of rail
- **Own It** – We care about every customer, partner and journey
- **Do Good** – We make a positive impact
- **Travel Together** – We're one team

Interested in finding out more about what it's like to work at Trainline? Why not check out what our employees say about us on [Glassdoor](#)? You can also find out more information by following us on [LinkedIn](#) or our 'Life at Trainline' [Instagram](#) account.

*We value open expression at Trainline, we believe it's the diversity of experience, backgrounds and perspectives of our employees that makes us who we are. We encourage everybody to play a part in changing the way people travel across the world.*

### **How the process will look like**

Your teammates will gather all requirements within our organization. Then, once priority has been discussed, you will decide as a team on the best solutions and architecture to meet these needs. In continuous increments and continuous communication between the team and stakeholders, you're part of making data play an even more important (and understood) part withing Brand New Day.

## **Job Benefits**

GBP 79K – 129K \*