

## Applied Scientist, Amazon Ads

### Description

Re-imagining the realms of what's possible in advertising.

Amazon is re-imagining advertising. Amazon Ads operates at the intersection of eCommerce and advertising and offering a rich array of advertising solutions and audience insights so businesses and brands can create relevant campaigns that produce measurable results.

At Amazon Ads, you can build models that impact millions every day. And we're passionate about solving real-world problems while using cutting-edge machine learning and artificial intelligence to do this.

For example, our applied science teams leverage a variety of advanced machine learning and cloud computing techniques to power Amazon's advertising offerings. This includes building algorithms and cloud services using clustering, deep neural networks, and other ML approaches to make ads more relevant while respecting privacy. They develop machine learning models to predict ad outcomes and select the optimal ad for each shopper, context, and advertiser objective, leveraging techniques like multi-task learning, bandit/reinforcement learning, counterfactual estimation, and low-latency extreme ML. The teams also utilize Spark, EMR, and Elasticsearch to extract insights from big data and deliver recommendations to advertisers at scale, continuously improving through offline analysis and impact evaluation. Additionally, they apply generative AI models for dynamic creative optimization and video experimentation and automation.

Underpinning these efforts are unique technical challenges, such as operating at unprecedented scale (hundreds of thousands of requests per second with 40ms latency) while respecting privacy and customer trust guarantees, and solving a wide variety of complex computational advertising problems related to traffic quality, viewability, brand safety, and more.

Help us take innovation in advertising to the next level.

Our teams are based in our fast-growing tech hubs in London and Edinburgh. Learn more about Amazon Ads, employee stories and available opportunities here: [https://www.amazon.jobs/content/en/teams/advertising/applied-science-machine-learning-research?ref\\_=a20m\\_us\\_car\\_lp\\_asml](https://www.amazon.jobs/content/en/teams/advertising/applied-science-machine-learning-research?ref_=a20m_us_car_lp_asml)

### Key job responsibilities

- \* Design, prototype and test many possible hypotheses in a high-ambiguity environment, making use of both analysis and business judgment.
- \* Collaborate with software engineering teams to integrate successful experiments into large-scale, highly complex Amazon production systems.
- \* Promote the culture of experimentation and applied science at Amazon.
- \* Demonstrate ability to meet deadlines while managing multiple projects.
- \* Excel communication and presentation skills working with multiple peer groups and different levels of management
- \* Influence and continuously improve a sustainable team culture that exemplifies Amazon's leadership principles

We are open to hiring candidates to work out of one of the following locations:

### Hiring organization

Candidate-1st

### Employment Type

Full-time

### Beginning of employment

asap

### Job Location

London, England, GBR

### Working Hours

40

### Base Salary

euro GBP 108K - 180K \*

### Date posted

May 23, 2024

Edinburgh, MLN, GBR | London, GBR

## Basic Qualifications

- PhD, or a Master's degree and experience in CS, CE, ML or related field research
- Experience programming in Java, C++, Python or related language
- Experience in building machine learning models for business application
- Experience building machine learning models or developing algorithms for business application
- Experience in any of the following areas: algorithms and data structures, parsing, numerical optimization, data mining, parallel and distributed computing, high-performance computing

## Preferred Qualifications

- Experience developing and implementing deep learning algorithms, particularly with respect to computer vision algorithms
- Experience in patents or publications at top-tier peer-reviewed conferences or journals
- Experience with generative deep learning models applicable to the creation of synthetic humans like CNNs, GANs, VAEs and NF
- Experience with popular deep learning frameworks such as MxNet and Tensor Flow

Amazon is an equal opportunities employer. We believe passionately that employing a diverse workforce is central to our success. We make recruiting decisions based on your experience and skills. We value your passion to discover, invent, simplify and build. Protecting your privacy and the security of your data is a longstanding top priority for Amazon. Please consult our Privacy Notice ([https://www.amazon.jobs/en/privacy\\_page](https://www.amazon.jobs/en/privacy_page)) to know more about how we collect, use and transfer the personal data of our candidates.

Our inclusive culture empowers Amazonians to deliver the best results for our customers. If you have a disability and need an adjustment during the application and hiring process, including support for the interview or onboarding process, please contact the Applicant-Candidate Accommodation Team (ACAT), Monday through Friday from 7:00 am GMT – 4:00 pm GMT. If calling directly from the United Kingdom, please dial +44 800 086 9884 (tel:+448000869884). If calling from Ireland, please dial +353 1800 851 489 (tel:+3531800851489).

## 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 108K – 180K \*