

(Senior) Research Scientist

Bloomsbury AI is a fully funded London startup created at UCL in 2015 by internationally recognised Machine Learning and **Natural Language Processing** experts. Our goal is to enable everyone (companies, groups of volunteers, your grandparents) to scale their expertise by teaching conversational AI agents through language and other intuitive means of communication. Our virtual agents read background documents, learn from their human teachers, and make novel inferences that their teachers did not even know about. In turn, they can help the human experts to help more people, or serve more customers, more efficiently. Our current product is a step in this direction: by simply pointing an agent to their favourite web page or internal documents, any user can obtain an AI expert for **questions** that can be **answered** by reading that page's content.

Responsibilities

As a **research scientist** you will actively participate in the company vision by developing and extending machine learning and Natural Language Processing (NLP) methods. In particular, you will develop:

- **Machine reading** methods that understand written text to the extent that they can answer questions about its explicit content, and that generalise to a broad range of domains.
- **Robust question answering** methods that understand when different questions ask for the same answer.
- **Reasoning** methods that can infer answers from text that are not explicitly stated.
- **Dialog** methods that acquire expert knowledge and deliver it to customers through conversations.
- Methods that automatically **explain** why the agent made its choices.

We rely on open research and open source code wherever possible, and we are committed to give back and share our progress with the community where appropriate. You are hence very welcome to:

- **Publish** high-quality research where appropriate for the company.
- **Communicate** our research and raise our research profile, e.g., through presentations, blogs etc.
- Provide and maintain **open source code** where appropriate. Our core goal is to build amazing products. You will hence also be expected to
- **Build production-quality implementations** of our methods within the context of our product.

When appropriate, work with the product team and dev team to align product, and product strategy, with research opportunities and what is feasible. As a **senior research scientist**, we will also expect you to

- **Supervise** and train a team of researchers.

- Help to manage and execute the **recruitment** process of the research team.
- Design and **optimise research workflows** and infrastructure that enables the R&D team to operate more effectively.
- Actively contribute to **product** development and company strategy.
- Take on additional responsibilities that arise in a small start-up company, such as hiring and participation in customer events.

Qualifications

As minimal requirements, you will:

- Have an **MSc** (or equivalent) degree in Machine Learning, NLP, AI, Mathematics or closely related fields.
- Be able to **communicate** fluently in written and spoken English .
- Have substantial experience in running **Machine Learning experiments in Python**.

A successful candidates will also have substantial experience in:

- Solving challenging technical NLP and ML problems in novel, sound and robust ways using Machine Learning and NLP, at a level that warrants publication in top tier venues such as ACL, EMNLP, NIPS or ICML. This can be actual publications, or solutions that were created in other non-academic contexts and are of the same standard.
- Independently deriving and framing research questions and hypotheses, and executing the corresponding research. A PhD will provide such experience, but we also accept non-PhD applicants if they have equivalent expertise.
- Implementing novel deep learning methods for NLP in standard deep learning frameworks (TensorFlow, Keras, Chainer, PyTorch, etc) from scratch.
- Quickly testing research ideas from conception to implementation to evaluation. As you will be embedded in a company with a strong focus on creating products that work and solve real needs, we expect you to have experience in:
 - Developing production quality Machine Learning and Natural Language Processing code in Python (for example, in public open source projects).
 - Software testing, continuous integration, software versioning systems.
 - Working with tight deadlines in a dynamic environment (changing requirements, changing inputs etc).

For the **senior research scientists**, we expect you to have experience in

- Experience in supervising and mentoring researchers.
- Developing team-wide research plans, for example, as necessary in writing grant proposals.

Compensation

At least £60K annual gross salary, but can be £70K or higher for exceptional candidates. Significant level of equity provided.

You would also have all the benefits of the employees, which are a flexible working times, monthly social event, 25 days of holiday and of course all the knowledge you may gain from a top-level technical team!

How to apply

Please send your CV with 3 references to apply@bloomsbury.ai