Algorithm Development and Data Retrieval Engineer

About the company

QPlox Engineering is a leading technology company specializing in innovative solutions for IoT frameworks, instrumentation systems, and test automation. Our clients are major multinational enterprises and local companies from automotive, semiconductors, RF, consumer electronics. We are committed to pushing the boundaries of technology and providing our clients with cutting-edge solutions. Our dynamic team thrives on collaboration, creativity, and continuous learning.

Job Description

We are looking for a talented and motivated Research Engineer to join our team, with a focus on advancing information retrieval and generative models. In this role, you will develop, implement, and fine-tune models to enhance both the accuracy of information retrieval and the user experience when interacting with generative models. We are particularly interested in multimodal scenarios where inputs extend beyond text alone. Collaborating with researchers, data scientists, and engineers, you will create innovative solutions leveraging large-scale datasets and cutting-edge machine learning techniques.

Key Responsibilities

- Design, implement, and optimize advanced information retrieval models, focusing on building a robust retrieval-augmented generation (RAG) system.

- Conduct research on the latest advancements in natural language processing (NLP), machine learning (ML), and information retrieval (IR).

- Improve user experience by enhancing the reasoning abilities of large language models (LLMs) and minimizing hallucinations.

- Develop algorithms to enhance the scalability and performance of RAG systems.

- Work closely with cross-functional teams to integrate RAG solutions into current products and services.

- Perform data collection, preprocessing, and analysis to support ongoing research and development.

- Evaluate and benchmark RAG model performance using large-scale datasets.

- Stay current with new developments in AI, NLP, ML, and IR technologies.

Location: Netherlands

Preferred Qualifications:

- Master's or Ph.D. in Computer Science, Electrical Engineering, or a related discipline with a focus on NLP, ML, or IR.

- Proficient in Python with hands-on experience using machine learning frameworks such as PyTorch.

- Strong understanding of deep learning models, including transformers, BERT, GPT, and related architectures.

- Proven research achievements, demonstrated through publications in top conferences and journals.

- Ability to work independently and collaboratively in a team, with strong problem-solving skills, attention to detail, and excellent verbal and written communication abilities.

- Expertise in retrieval-based models such as vector space models, BM25, or neural retrieval techniques, is highly desirable along with hands-on experience with ASR

- Familiarity with knowledge bases, information extraction, and question-answering systems.

- Background in software development and engineering best practices is a plus.

Benefits

- An attractive salary package with extra benefits. A high tech, multicultural and young ambient with flexible working hours and remote work options.
- A fast track in a growing company. Formation in multidisciplinary environment plenty of learning opportunities.
- Opportunities for professional growth and development.
- Collaborative and innovative work environment.
- Plenty of learning opportunities.

Contact

Send your CV and application letter detailing their experience and qualifications to jobs@qplox.com with the subject ¨**Speech and Language Processing Recognition Researcher**¨.