AI-based Search in E-Commerce

WEBSALE creates online shops – with passion. For more than 25 years, we have been helping our customers succeed in e-commerce. As pioneers, we established the first cloud-based online shops in Germany. With our combined offering of e-commerce software, including support, hosting, and our own agency, we ensure functional e-commerce processes and support the growth of our customers.

Task:
Our goal is to enhance the online shopping experience through cutting-edge technology and user-centred design. You will develop an AI-based search solution in Python, which will be integrated into our existing framework. This solution should be powerful, scalable, and intelligent to improve the user experience and increase conversion rates.

Tasks and Milestones:

- **Analysis and Understanding Requirements:**
    - Examine the functions and features of modern search solutions.
    - Gather and analyse stakeholder requirements to ensure the search solution meets business needs.
- **Development of AI-driven Search Algorithms:**
    - Design and implement AI-driven search algorithms, including fuzzy search, semantic search, and synonym processing.
    - Utilize deep learning and natural language processing to improve the relevance and accuracy of search results.
- **Implementation of Dynamic Filters and Category Lists:**
    - Develop dynamic filters that adapt to user queries and eliminate unnecessary options.
    - Create intelligent category lists to enhance product discovery and user engagement.
- **Integration of Data Aggregation and Recommendations:**
    - Implement a data aggregation module to enrich search data and generate highly relevant product recommendations without cookies.
    - Ensure recommendations are seamlessly integrated into search results and product detail pages.
- **Optimization and Maintenance of the Solution:**
    - Continuously monitor and optimize the search solution for performance and scalability.
    - Provide ongoing support and maintenance to ensure the solution remains effective and up-to-date.

Requirements:

- Excellent programming skills in Python and familiarity with relevant frameworks and libraries.
- Experience with deep learning, machine learning, and natural language processing.
- Knowledge of data protection regulations and best practices.
- Excellent problem-solving skills and attention to detail.

What You Can Expect from Us

You will be assigned to one of our developers who will take care of you during the semester via regular 1-to-1 meetings (online or offline) and support you in the project. We are very flexible in terms of working time and, of course, will stay within the boundaries of the ECTS limit of the IDP.

What We Expect from You

If you can work independently and want to do something hands-on, then we are your partner! Besides the regular meetings, you will have complete freedom in terms of time management. It's your project!

Contact Information

At WEBSALE, your performance and personality matter. We value diversity and encourage applicants from all walks of life to apply.

Do you have questions? Feel free to contact Vera by phone at +49 911 6322 1629. Are you interested? Then apply now at Bewerbung@websale.de. We look forward to getting to know you!