



SOCIAL AND COGNITIVE INFORMATICS LABORATORY

HSE
YANDEX
LAB



EDFITTER

AN AI-SYSTEM FOR MATCHING LEARNING CURRICULA WITH JOB MARKET

Social and cognitive informatics Lab (SCILA)

HSE-Yandex lab for natural language processing

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EdFitter is an innovative AI-driven platform designed to align university curricula and personalized learning paths with the dynamic skill demands of today's job market. Developed by a dedicated team at the Higher School of Economics in St. Petersburg, Russia, under the expert guidance of Prof. Sergey Koltcov, EdFitter is set to revolutionize how education meets industry needs..

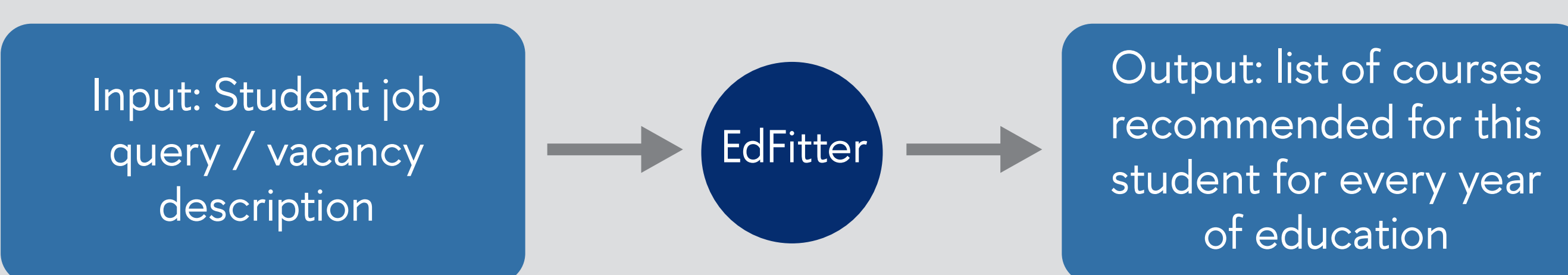
MOTIVATION

- **Addressing the gap:** There is an increasing disconnect between the skills imparted by educational institutions and those sought by employers in a rapidly changing job landscape.
- **Adapting to change:** As industries evolve, new roles and competencies arise, requiring continuous updates to educational programs to keep pace with these advancements

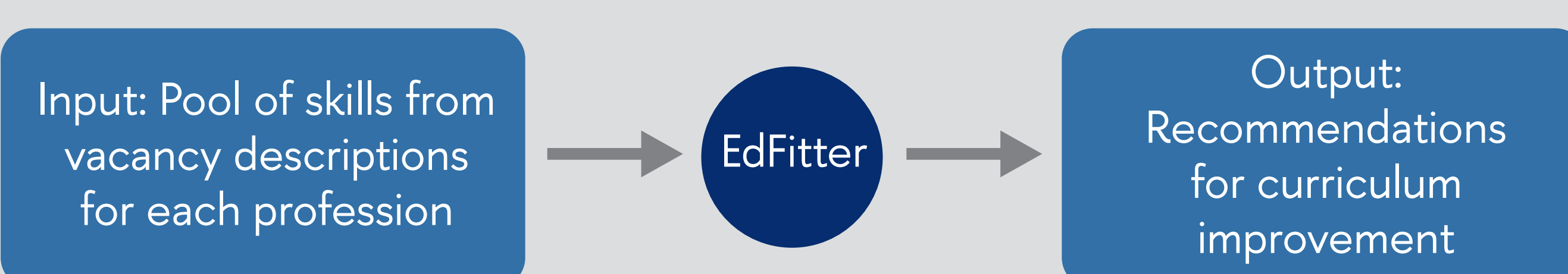
FUNCTIONALITY

EdFitter uses information from vacancy descriptions available at job search websites, curricula and course syllabi from a particular university (or a pool of educational organizations / platforms), and individual student queries on their desired jobs. By jointly analyzing this data, EdFitter serves the following goals by generating respective recommendations:

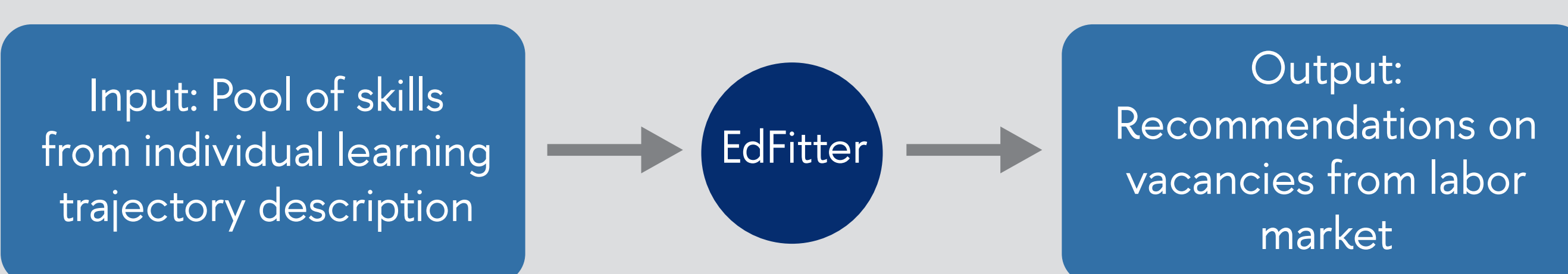
- **Learning strategy development:** Advice for individual students on course choice and their personalized learning trajectory, given their interest in specific jobs



- **Curriculum development:** advice on changing course composition, sequence and content in existing curricula and on building new degree and non-degree programs (under construction)



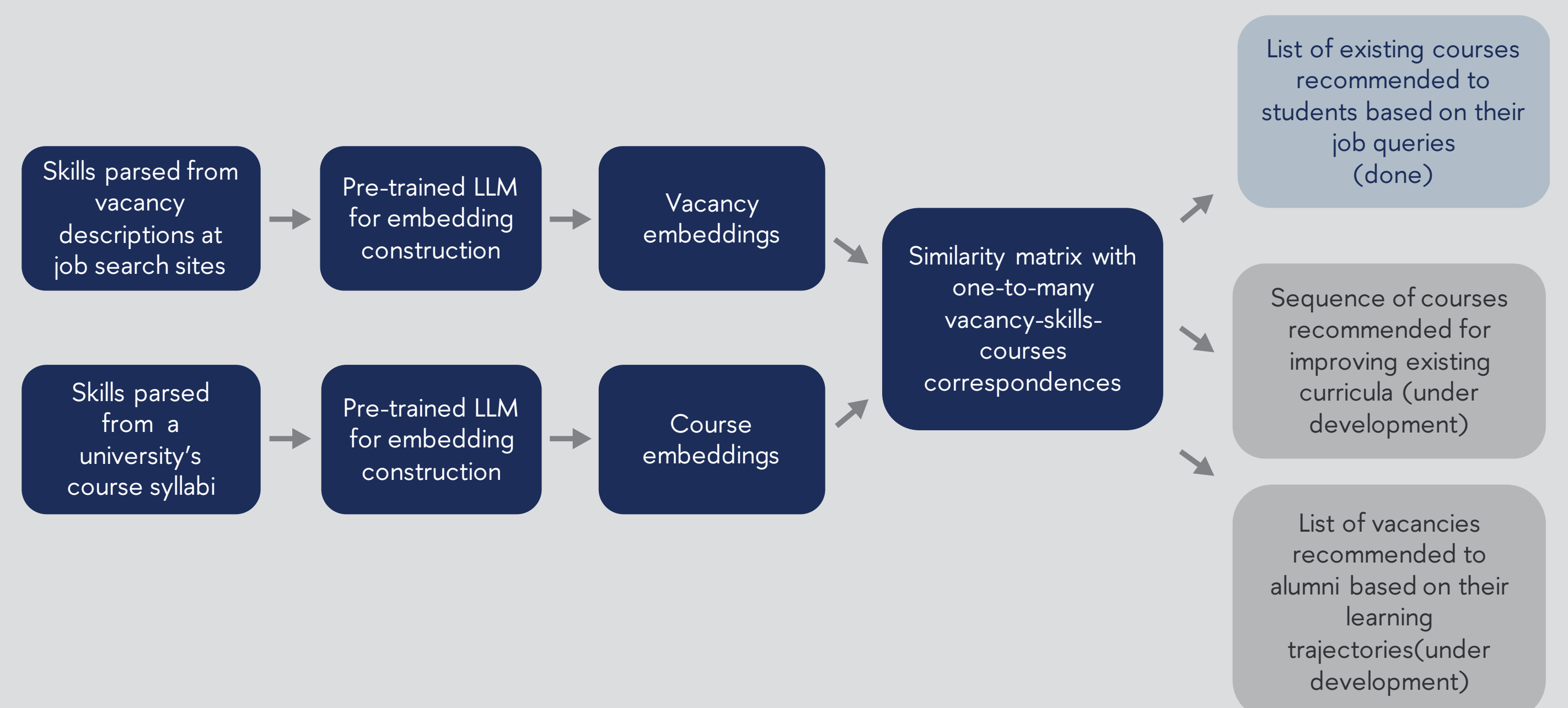
- **Job search:** advice on jobs best fitting the existing skills of an individual alumnus (under construction)



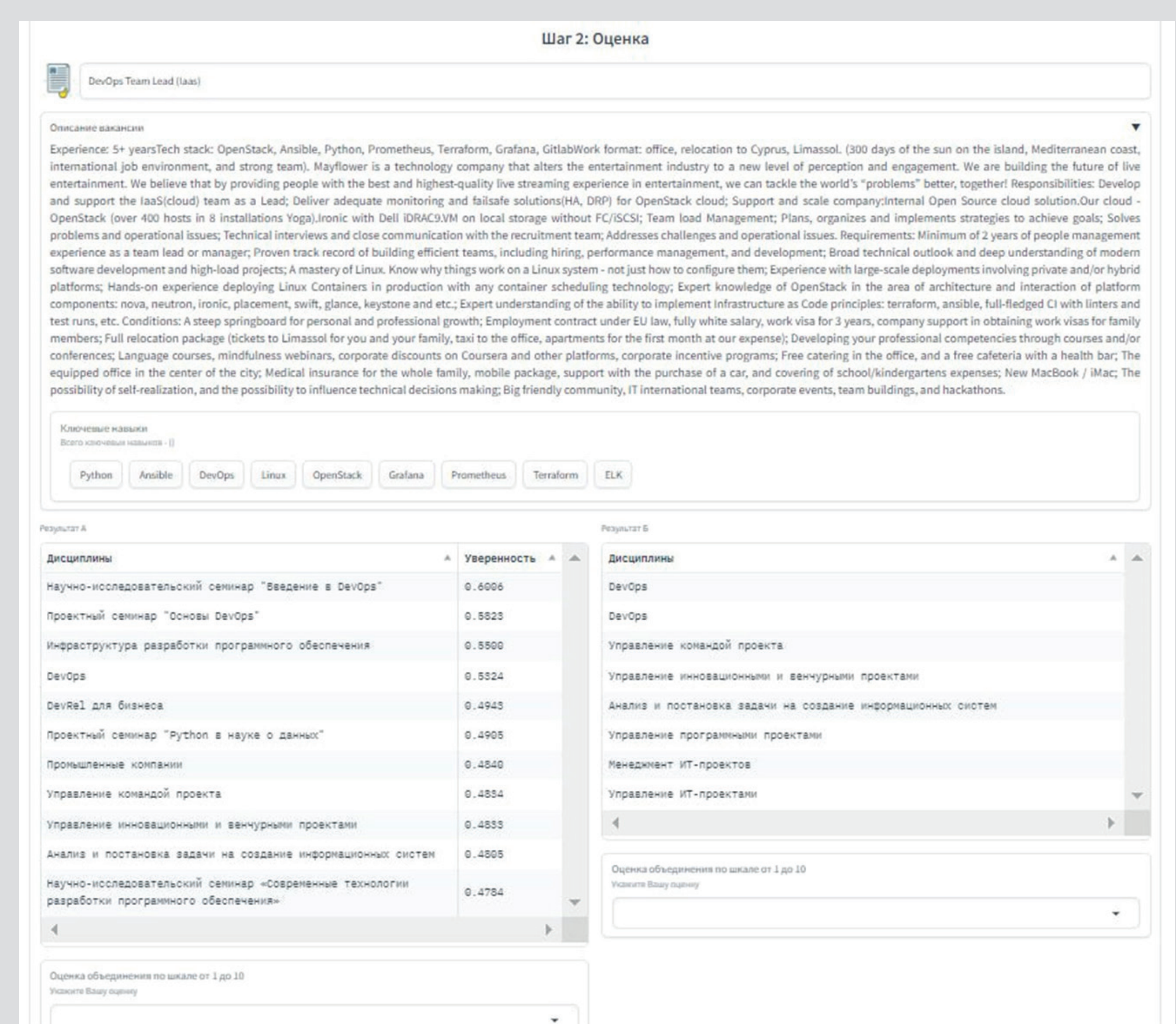
EDFITTER TARGET AUDIENCE

- **Individual students and prospective students** seeking to optimize their personalized learning trajectory
- **Job seekers:** alumni seeking to find vacancies based on the set of their skills acquired during education
- **Educators:** curricula and course developers and educational managers
- **Educational policy makers:** government decision makers seeking to match national educational strategies with job market needs and to optimize funding allocation

ARCHITECTURE



PROTOTYPE INTERFACE



GENERALIZABILITY

- Adjustable to other languages
- Expandable beyond a particular university
- Tunable for multiple job markets and sectors