

## **Intelligent Agents Used in the Digitization of Pre-Employment Processes for People with Disabilities**

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### **Abstract**

**Introduction:** The present work presents a job crawler based on intelligent agents, a multi-agent system, an innovative way of using web technologies with their application in the digitization of pre-employment processes for people with disabilities. The research is carried out within the project "CAREJOBS - Resource platform for people with disabilities" SMIS 156142.

Within the project, we developed a web application based on intelligent agents that act on the basis of scientific workflow & rule engines, being configured and optimized to extract data of interest in the field of recruiting people with disabilities.

**Aim:** The goal is to present an effective way to solve a real problem on the job market, that of searching and finding a job for people with disabilities.

**Method:** The software application is a prototype of a multi-agent system developed to validate the feasibility of the CAREJOBS concept. Qualitative and quantitative methods were used for research and simulation, testing, and formal methods for the software development process. The neural network method is used to represent the results.

**Findings:** These methods highlighted some omissions and the team concluded that certain tools would have facilitated the analysis process and software development and improved the product based on the results obtained.

**Originality and value:** The obtained results validate the system in the simulated environment.

**Key Words:** Employment, Crawling, Intelligent agents, Digitization

**Jel Codes:** C88, M55

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