How to Use Machine Learning to Analyze Thousands of Applicant CV-s in Seconds

Case Study

Contents

CLIENT:	DEVELOPER:	TEAM SIZE:	TECHNOLOGIES:
Estonian Unemplyment Insurance Fund	Helmes	15 people	MariaDB, php, Oracle, F5, Solr

Skip a time-consuming analysis of thousands of applicant CVs and let a machine learning system provide you with the best candidates for your job ad. With machine-learning techniques, you can do it within seconds.

The client

The Estonian Unemployment Insurance Fund is an unemployment-related social insurance provisions administrator for the entire country. A big part of its daily work is focused on advising people on a job search and their employment choices, as well as **advising employers and finding suitable talent matches for them.**

The task

To make the job search process and linking matches easier and faster for both potential employers and employees alike, the Insurance Fund decided to build a job mediation environment that would give a little extra support. Helmes was tasked with creating a top job mediation portal that uses machine learning to do the matchmaking.

The solution

We created a job mediation system that uses machine learning to do the benchmarking.

This platform is essentially a job portal with several advanced features. The ad-on that makes it so smart is a complementary machine-learning component. It has been developed as a part of the job mediation module, and its main job is to match the job ads with appropriate CVs. It allows ranking the applications according to the applicants' skills, previous job experience, other proficiencies, and so on.

Incredibly useful tool

Skills

Languages

Location

Shifts

Job preferences

Salary

Experience

Certificates

Licences

Education

It is an incredibly useful tool for the employer since the portal cuts away the waiting time for the applications to arrive. Also, there is no more need to invest time to work through the information of all the interested candidates to find the ones who are qualified.

When a job ad is posted at the portal, it is first validated by the Unemployment Insurance Fund specialist and then released to the system. The system sorts through tens

of thousands of CVs already entered in the system and preselects appropriate matches who best correspond to the requirements. It also filters suitable matches and places them in rank order. Employers see only those CV-s that match the job description.

A similar pre-selection is done for the job seeker, who now has an automatic display of the job ads from appropriate fields. The job seeker has to push only one button to apply for the position in interest.

A peek into the backroom

The job mediation platform enables the following:

General

- A recommendation component according to the standard job titles using the International Standard Classification of Occupations (ISCO).
- Find and match job seekers with ads according to multiple criteria.
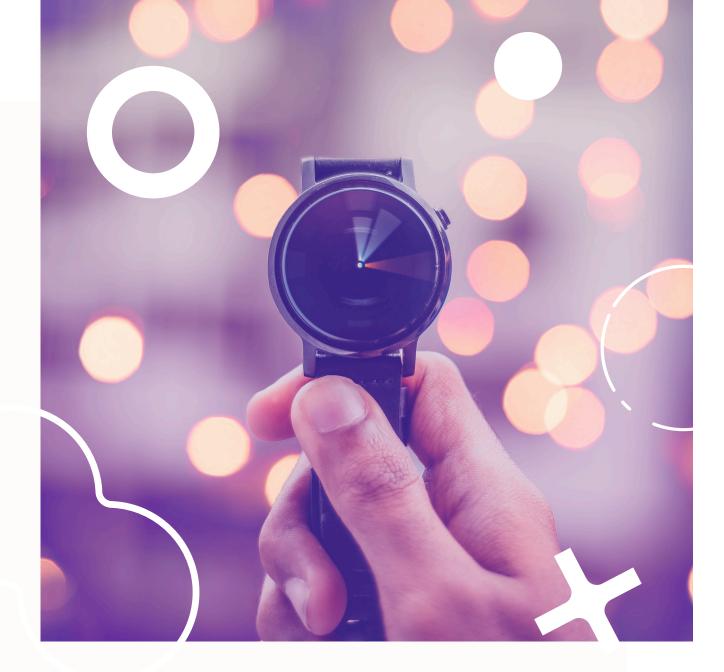- Find suitable ads for job seekers according to multiple criteria.

Person

- Enables a public search of all job ads.
- Create a CV with ease in a couple of minutes with prefilled data from the Insurance Fund's system and four national registers.
- Manage the personal data of the job seeker (add and edit CVs and generating a PDF format).
- Receives automatic reminders of the new suitable job openings.

Employer

- Job ads data service for the employer where all its job ads can be viewed with detailed information.
- Job ads managing service for adding, editing, and extending the ad.
- Closing job offers and marking the results.

Consultant

- A processing system that enables consultants to direct job seekers to specific job ads, to inform job seekers about the job ads via e-mail, and to note the ad is not suitable for a particular job seeker.
- Allow consultants to accept or reject job offers.
- A staff search service that allows forwarding matching job offers to suitable candidates.

Significant time and money savings

This platform significantly decreases the time and money invested in finding the best matches in the job market. Plus, it is extra fast – the matching of job ads and job seekers takes place in real-time. When a job ad is published in the system, it calculates the best matches immediately according to the current data.

The win for businesses with this system is that each employer receives a preselected list so they can get in touch with suitable candidates. Job seekers are offered ads that match their interests and qualifications. And both happen at lightning speed.

CLIENT TESTIMONIAL

Helmes has proactively helped us to develop the self-service portal that more than 50 percent of our customers use. Our self-service is a well-accepted tool by job seekers, career changes employers, and partners and is gaining momentum year after year. The most significant impact of the job mediation module is that we can provide better and faster matches between the people and job ads. The cooperation between Helmes and the Unemployment Insurance Fund in creating a self-service portal has been agile, flexible and we have been able to react to rapid environmental changes, as was the case in 2020 emergencies and lockdowns. Helmes is a strong link in our larger team of development partners to provide the necessary services to our customers and to contribute to the implementation of e-government in Estonia.

INDREK MÕTTUS
IT development manager
Estonian Unemployment Insurance Fund

Who is Helmes

1000+
experts

44m+
annual turnover

30+
years

23+
markets

93m+
end-users

Helmes is a strong team of 1000 people who create software in 23 countries. Our flagship offices are in Tallinn and Minsk, with supporting offices in New York, San Diego, Mumbai, Tartu, and Brest. Throughout our 30-year history we've served more than 500 companies, organizations, and governmental agencies.

We're proud to have played an integral part in the pioneering development of **e-government solutions** like **digital prescriptions** and **e-elections**. International clients like Telia, Kuehne+Nagel, and the OECD have entrusted us to create, integrate, and manage their **most complex businessand mission-critical information systems.**

OUR CLIENTS

2PARK | fluxloop | AXELL CLAIMS | betsson Anytime's playtime | EA/NS | e-estonia | PILETI LEVI | KING'S College LONDON

Eesti Töötukassa | STEPIFI | Tallinn | Telema | Telia | Jiffy it's all about the roots | KUEHNE+NAGEL

Post11 Part of Estonian Post Group | Solera | PrimeKey | Regionaalhaigla | RMK | SAFRAN | OECD BETTER POLICIES FOR BETTER LIVES

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Our clients are saying that with us, software development is a hassle-free process. But it's better to experience it yourself. Put our software development experience work for you. Let us assemble a team to make your project a success.

Send us an e-mail to **info@helmes.com** and we will assign the best proffessional we have to contact you.