AI MODEL AT ENBEK.KZ
Subordinate organisation of the Ministry of Labour and Social Protection of the Population

**THE MISSION IS:** Assistance in creating conditions for the development of an efficient labor market and improving the quality of public services provided in the social and labor sphere.

### ABOUT THE CENTER FOR DEVELOPMENT OF LABOR RESOURCES

1. Development of digital infrastructure of the state social and labor sphere
2. Improving the quality of employment services
3. National Qualifications and Skills Development System
4. Analytical support and forecasting

#### The users
- Coverage of 20 million people
- Services for public authorities
- Services for local executive bodies, including 2,400 rural districts
- Unified pension savings fund
- Social Health Insurance Fund
- NAO State Corporation “Government for Citizens”
- Subordinate organisations of the Ministry of Labour and Social Protection of the Population

---

CONVENIENT END-TO-END AUTHORISATION ON ALL PORTALS
INTEGRATION WITH INFORMATION SYSTEMS OF STATE BODIES
SYNCHRONISATION OF SERVICES, AUTOMATIC “GARTER” OF NECESSARY DOCUMENTS
IMPROVING THE AVAILABILITY AND QUALITY OF EMPLOYMENT SERVICES
Training in new skills

- Guide of professions
- The Professional Standards
- Register of professions
- Certification, validation of professional qualifications
- E- Voucher for confirmation of qualifications for registered unemployed
- Expertise
- Information, analytics

Employment

About the National Authority for Professional Qualifications

- Development of proposals and recommendations, coordination on the development of the National Qualifications System
- Assistance in the development of an independent and objective system of recognition of qualifications of specialists
- Formation of a unified system of existing professions, qualifications in accordance with the requirements of employers
- Assistance in increasing motivation and building career growth of citizens

Law “On Professional Qualifications”

Launched NSCDigital Platform

National Qualification Authority established
Automatic identification of skills demanded by employers

Online learning at Skills.Enbek

Displaying the certificate in the CV Employment for the desired position

Choice of course of study from Certified Providers

Validation of knowledge gained and obtaining a certificate

477 online courses

182 professions

328 thousand people received certificates
ENBEK.KZ – EMPLOYMENT AND EMPLOYMENT SERVICES PORTAL

- Integration with 18 information systems of state bodies
- “Work without borders” – integration with the international system of job search and recruitment in the territory of the EAEU countries: Armenia, Belarus, Kazakhstan, Kyrgyzstan and Russia
- Integration with the Public Service Agency personnel management information system
- Connected 207 quarry centers (and integration with IP “labour market”), private employment agencies, 5 Internet sites

Registration on the portal
— applicant by electronic digital signature, QR code, mobile phone number
— employer by electronic digital signature

Online job fairs on a regular basis across the country
Applying for Social Payment for Loss of Work and Automatic Direction to the State Social Insurance Fund

Automatic selection of vacancies for subsidised jobs (FM, OR, MP, PPM, KP, SV).

Direction of response to the employer.

Unemployed person can independently close registration in the personal account.

---

Provision of public services through the portal
- registration in the Career Centre as a Job Seeker (LIR) and unemployed
- application for Social Benefits for Loss of Work
- selection of vacancies for subsidised jobs
AI MODEL FOR RECOMMENDATIONS AT ENBEK.KZ

Based on LinkedIn architecture

Libraries are used:
➢ for AI – SentenceTransformers, pytorch

The algorithm: the text is translated into numbers (vectors), then search the nearest vectors to the query vector

Filters by date, way of work, salary, location

Text of CV

Model of NLP
➢ at the entrance text,
➢ output - numbers (vectors)

Text of vacancy

Vector of CV

Search for nearest vectors by distance

Vector of vacancy

Recommendations
CV – vacancies
Vacancies - CV

232 620 jobs
241 201 up-to-date CVs
125 723 employment
AI MODEL FOR ENBEK.KZ RECOMMENDATIONS
improving the quality of model recommendations by educating the model based on additional data

development of models for the recommendation of courses for applicants based on the contents of CVs

application of the model on the portal hr.enbek.kz for automatic selection of NCPs according to the position

application of AI models in the internal functions and products of MLSPP and the Centre for Development of labour resources
Thank you for your attention!