



## EU skills and jobs explorer

Interactive dashboards for policy analysts

# Croatia

### Aims

The solution aims to support policy analysts in the following questions:

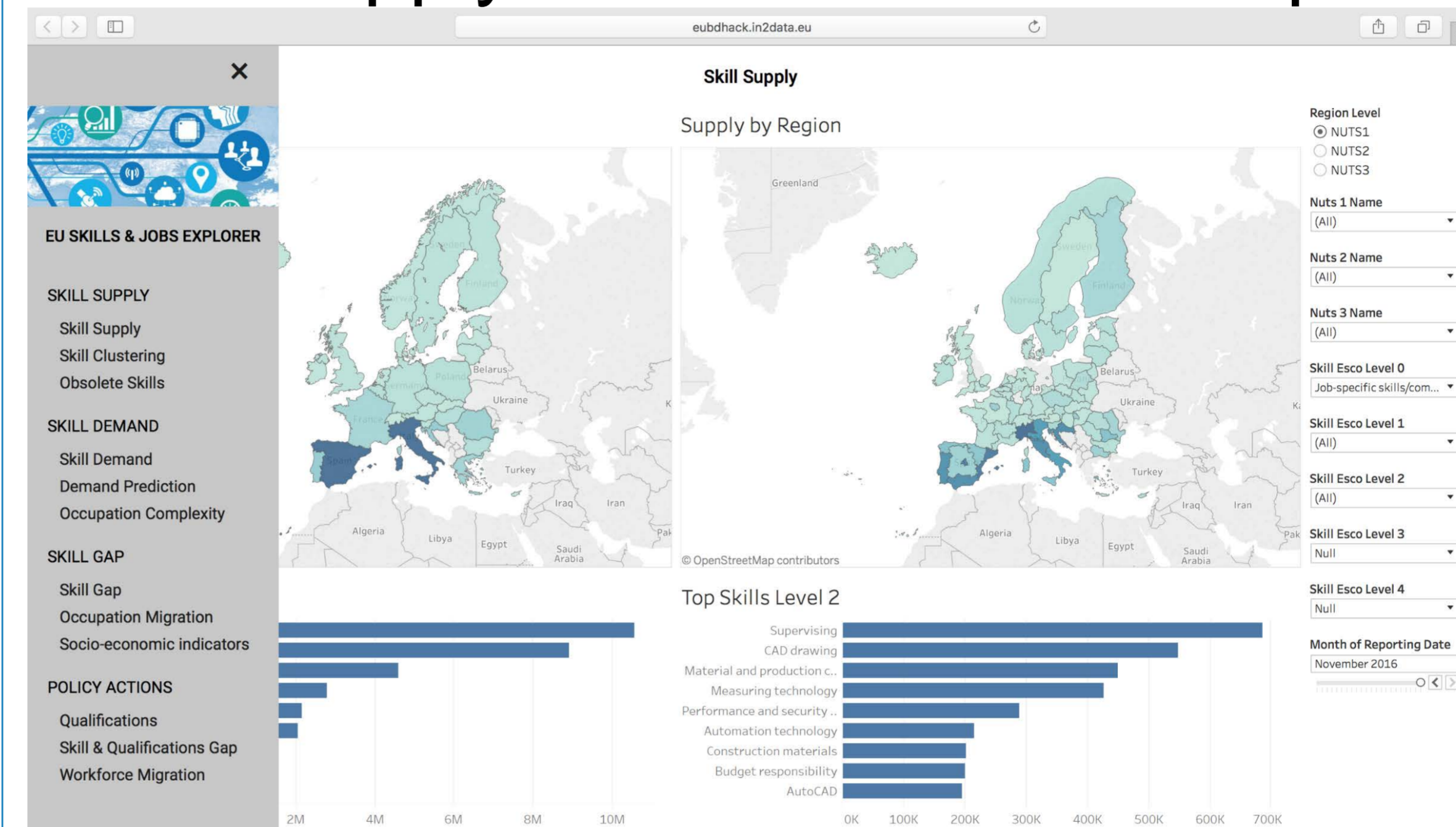
- Which skills are in supply and demand, and where is the biggest skill gap across EU regions?
- How can the skill gap be closed?

### Data

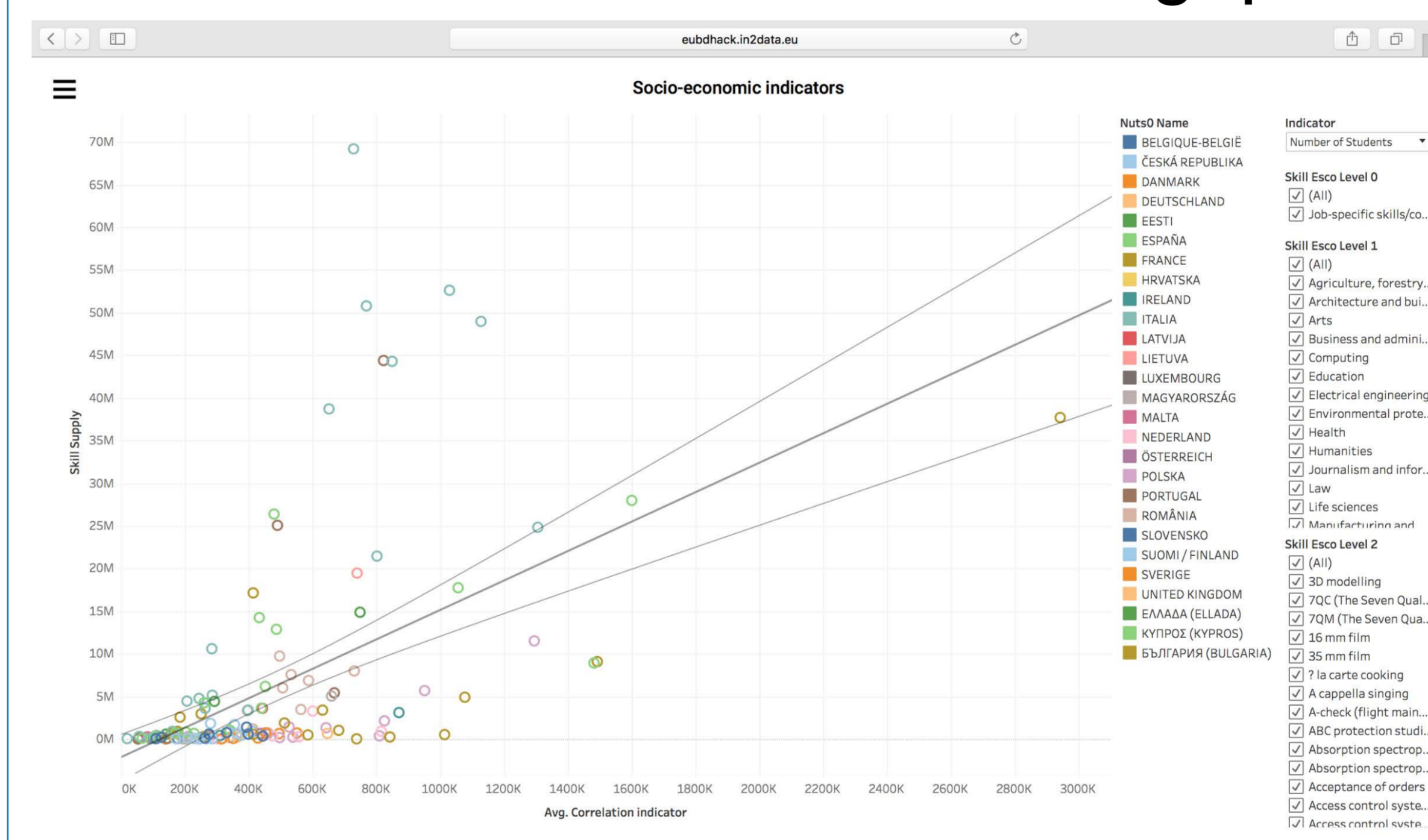
- Cedefop vacancy data
- EURES job vacancies and CVs
- Surveys: LFS, SILC and PIAAC
- ESCO and ISCO
- Cedefop ESJ survey
- Various Eurostat data sets at regional level (macroeconomic indicators, sociodemographic data, NUTS region shape files, etc.)

### Results

- Skill supply dashboard with collapsible menu



- Correlation analysis of various socio-economic indicators and skill gap



### Methods, technologies and tools

- Entire solution is running on Google Cloud Platform
- All data were loaded on Google Cloud storage (data lake) and then loaded on Google Big Query
- For most data processing we used a cloud instance with Python and R
- There was no time for advanced NLP methods, so we mainly used fuzzy matching
- Dashboards were built using Tableau and embedded into website

### Conclusions

#### Key achievements:

- skill supply, demand and gaps can be measured on all NUTS and ESCO levels;
- obsolete skills and occupations with high skill volatility can be identified & skills in demand forecasted;
- analysis of qualifications vs skill demand and workforce migration can support policy actions.

#### Main challenges:

- the biggest issue was asymmetry in data availability across member countries and regions;
- advanced NLP methods are required, which are time consuming.

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