



1975-2015



Analysing online vacancies for LMI

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Overview

- Online vacancy data how and why?
- Information on Cedefop project
- Some indicative results

Background

- Internet – rich source of the information
 - Why not to use it?
- Frequently asked research questions
 - Can we project future jobs?

– Can we see where the jobs are?

... however...

Yes



Online vacancy data

- Instant and big volume of information...
...information is unstructured and imperfect.
- Relatively low running costs...
...cost for being overloaded by information.
- Driven by the content...
... content restrictions.

Ethical / legal issues

- Issues
 - Copyright Infringement and privacy
 - Breach of Contract
 - No legal framework (so far)
- Consequences
 - Costs for website owner
 - Denial of the service (anti-robot policy)
- Solutions
 - Be conscious and respectful
 - Ask for permissions

Cedefop working prototype

- Key features
 - Currently piloted in (CZ, IE, UK, DE, IT)
 - Use of standard taxonomies (ISCO / ESCO)
 - “Man (human, woman) in the loop”
 - Open source/non commercial solution
- 3 phases:
 - Feasibility study
 - Development of working prototype + analyses
 - Adoption of the prototype

Current stage

- Transfer of technology
- Understanding the limitations
 - Coverage vs. reliability
 - Duplication and classification errors
 - Testing Skills vs. job requirements
- Understanding the results

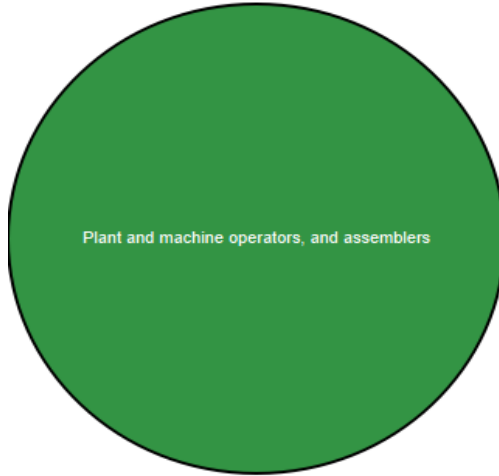
Working prototype – data overview

Country	Vacancies	De-duplicated	% of vacancies	Accuracy of ISCO classifier
IT	276 909	137 291	49.58%	80%
CZ	100 055	91 393	91.34%	98%
DE	186 023	945 858	60.77%	79%
IE	152 661	70 033	49.81%	-
UK	2 142 942	1 730 304	80.74%	80%
Total	4 228 491	2 980 546	70.49%	-

Data gathered in June – September 2015

Skill and occupations

Select occupations (ESCO lvl. 1)



Filter by frequency
2 to 589,959

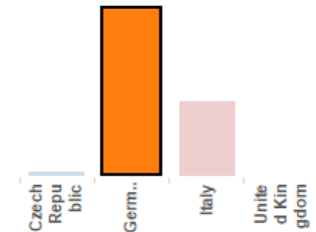
Select occupations (ESCO lvl.2)



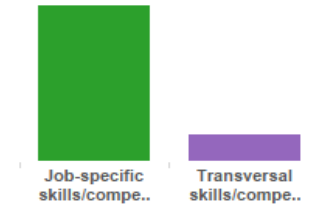
Select occupations (ESCO lvl.3)



Country



Skill (ESCO lvl.0)



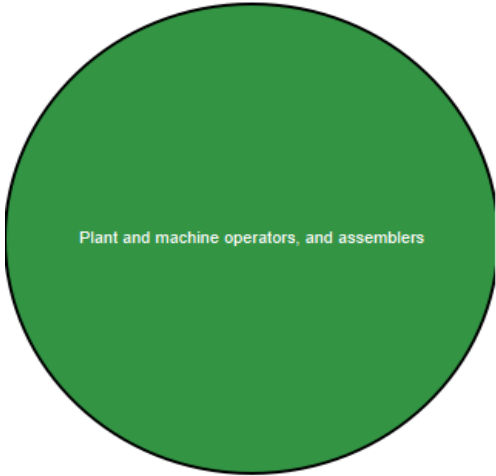
Search for a skill
All

Skill detail (ESCO lvl.3)



Skill and occupations

Select occupations (ESCO lvl. 1)



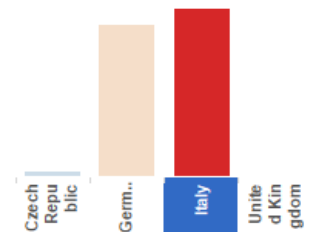
Select occupations (ESCO lvl. 2)



Select occupations (ESCO lvl. 3)



Country



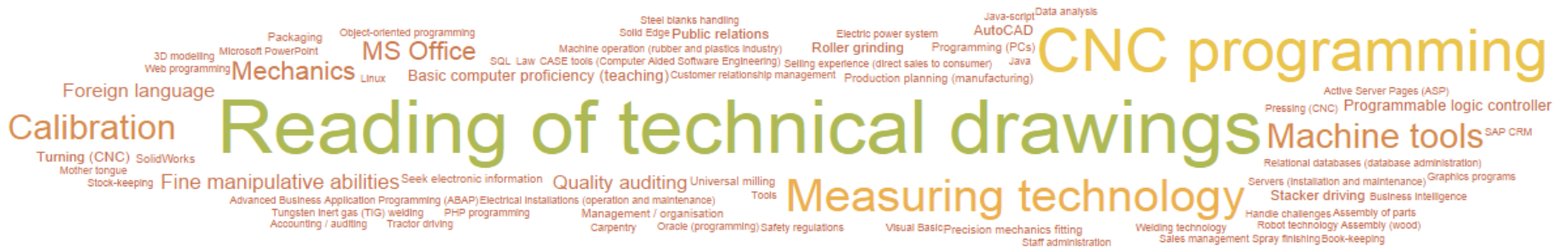
Skill (ESCO lvl. 0)



Filter by frequency
2 to 589,959

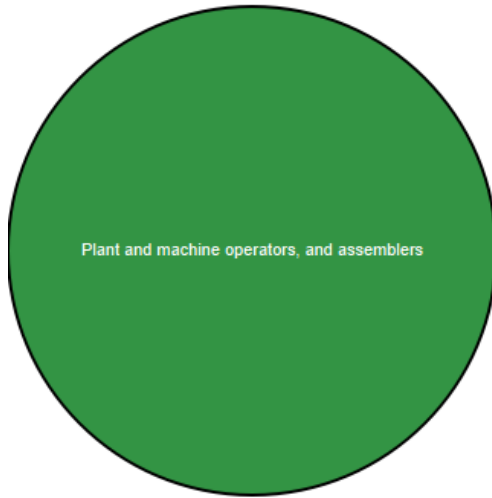
Search for a skill
All

Skill detail (ESCO lvl. 3)



Skill and occupations

Select occupations (ESCO lvl. 1)

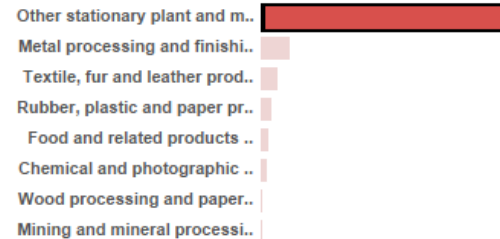


Filter by frequency
2 to 1,900

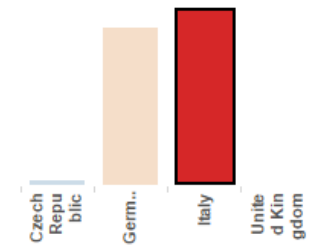
Select occupations (ESCO lvl. 2)



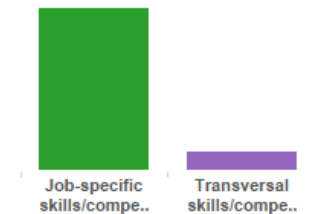
Select occupations (ESCO lvl. 3)



Country



Skill (ESCO lvl. 0)



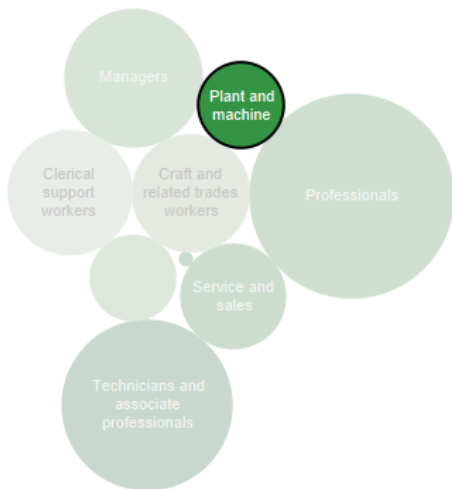
Search for a skill
All

Skill detail (ESCO lvl. 3)



Skill and occupations

Select occupations (ESCO lvl.1)



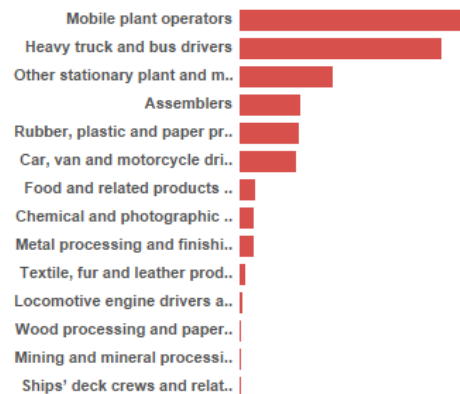
Filter by frequency
2 to 589,959

Skill detail (ESCO lvl.3)

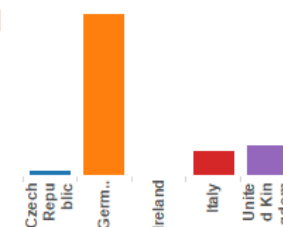
Select occupations (ESCO lvl.2)



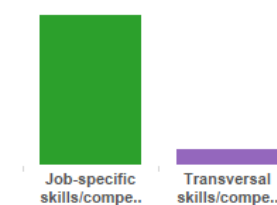
Select occupations (ESCO lvl.3)



Country



Skill (ESCO lvl.0)



Search for a skill
Contains "robot"

Robot technology

Conclusions

- Internet – rich source of the information
 - Is it really useful?
- ... some “however’s”
 - not all vacancies are online
 - vacancy can reach only the end of the signal
 - employers may want more
 - Information is strongly subjective
- ...therefore
 - need to understand vacancies and hiring practice
 - reliability dilemma - quality vs. quantity
 - another input to LMI not universal cure...



Thank you for your attention

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