Big Data for Labour Market Intelligence

Capacity development programme 2022

Module 2: Dissemination and analysis

Session 5

New angles of analysis based on OJV databases: demand for green skills; demand for remote work (Ukraine).

Speaker: Anna Clara Gatti

16/11/2022
Topics

- New angles of analysis based on OJV databases
- Methodology
- Demand for green skills
- Demand for remote work
Beyond "traditional" variables

New analytical questions

How **Green Economy** is evolving in the countries of interest?

How much **Remote Work** is present in each Labour Market?

**Occupation** → **Education level** → **Sector / industry** → **Knowledge, skills, attitudes**

**Contract type** → **Experience** → **Place** → **New dimensions**
Q: How Green Economy is evolving in the countries of interest?
Are you passionate about environmental issues and tackling climate change?

We are an award-winning Social Enterprise with a mission to enable, inclusive, sustainable, growth. As a commercially driven not-for-profit organisation, all surplus is reinvested into our services supporting growth that has real impact.

The Growth Company’s ambition is to play a key and strategic role in support of the UK ambitions to be Net Zero. To expand our sustainability activities, we are looking for new colleagues for a range of positions from graduate entry to senior advisors/consultants.

Areas of expertise include product and business carbon footprinting, business energy & resource efficiency auditing, building energy management systems, efficiency, carbon reporting, energy analytics, renewable energy, carbon management, environmental programme management.

GC offers an inclusive and flexible working environment with a wide range of benefits which can be found at https://www.growthco.uk/gc-careers/life-at-gc/

If you are interested, please click apply and include your CV along with a brief paragraph outlining your core competencies and experience within this sector.

As part of our commitment to increase the diversity of our workforce, we provide a guaranteed interview to applicants who meet the minimum requirements for a role. This commitment applies to candidates who have a disability or are from a Minority Ethnic community.
Q: How much Remote Work is present in each Labour Market?
Ukrainian Interpreter - Remote

Lingoland
London
Remote
£1,000 - £2,000 a month - Freelance

Apply now

Job details
Salary
£1,000 - £2,000 a month
Job type
Freelance

Benefits
Pulled from the full job description
Flexitime | Work from home

Full Job Description

We are hiring UKRAINIAN - ENGLISH INTERPRETERS!

We are looking for experienced interpreters who want to join an international company and be a great help to the community.

Do you have one year of experience working as an Interpreter/translator? Do you enjoy what you do? Would you like to be part of a dynamic team with solid possibilities of professional growth? While making extra cash in your spare time? If so, we want to hear from you!

Job Overview:
The Interpreter provides interpretation for Limited English Proficient (LEP) patients, their families, providers, and staff. The Interpreter advocates for LEP patients' access to the full range of health care services providing intercultural mediation to assist providers in delivering culturally sensitive patient care. A commitment to provide exceptional customer experience, patient privacy & safety, and teamwork spirit is required for this position.

Company Info

Follow
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Additional pay:
- Commission pay

Benefits:
- Flexitime
- Work from home

Schedule:
- Monday to Friday

Application deadline: 18/08/2022
Reference ID: UKR384

Hiring Insights

2. Hiring 5 candidates for this role

Job activity
- Employer reviewed job 8 days ago
- Posted 15 days ago

15 days ago
How to answer these questions?
Data pipelines

Language Detector → Pre Processing → UA Model → Classified Items (1-n)

Training set By OJAs Corpus UA
Demand for green skills
Demand for green skills

How Green Economy is evolving in the countries of interest? → Demand for Green Skill in online job vacancies → Which taxonomy to use?

ESCO Skill Taxonomy is no longer enough → Need for a design phase → What reference framework?

The “European Green Deal”

The "European Green Deal"

Ensuring coherence with the "policy areas" in which the "European Green Deal" is articulated, we defined seven declinations of green skills for this project.
ETF Green Skill families

- **Environment and sustainable tourism**: the skills related to the management of forests and maritime areas, environmental protection, and management of loss of species and ecosystems as well as their exploitation through sustainable forms of tourism.

- **Sustainable agriculture**: the skills necessary for the development of sustainable agriculture for producers, consumers, and the environment.

- **Sustainable construction**: the skills to initiate a process of renovation and new construction that improves the energy efficiency of buildings and brings building design in line with the circular economy.
ETF Green Skill families

- **Sustainable economy**: the skills related to the concept of circular economy.
- **Sustainable energy**: the skills needed to change energy production by replacing current energy sources with renewable energy sources.
- **Sustainable production**: the skills needed to modify current production styles by reducing the environmental impact of companies.
- **Sustainable transport**: the skills related to the reduction of emissions caused by transport both with the use of innovative fuels less polluting and with forms of mobility sharing.
Terms set definition

1. Framework reference the “European Green Deal”
2. Definition of seven Green Families
3. What are the key words to search for?
   - Two step approach
   - Selection by Domain Expert
   - Validation and integration by Country Experts
Terms set definition - example

- Environment and sustainable tourism:
  - environmental protection
  - green tourism
  - habitat restoration
  - sustainable tourism

- Sustainable agriculture:
  - climate smart agriculture
  - conservation agriculture
  - aquaponics
  - precision agriculture

- Sustainable energy:
  - carbon neutral fuel
  - energy conservation
    - solar power
    - wind generator

• The set does not need to be limited to skills-like terms, but can include general terms that can be found in postings’ text and can be linked to green economy (e.g., Solar power)
• The set of terms is language dependent: each language has its own terms, localized and reflecting specific terminology and culture
Terms extraction

Definition of seven Green Families → Definition of Green Terms

Information extraction → Identification of online job vacancy language

Search for Green Terms → Association with Green Family
Identification of online job vacancy language

Search for Green Terms

None of the green terms are in the ad this job posting.

Terms extraction - example

**Junior Software Engineer**

**Full Job Description**

As Junior Software Engineer in World Service, you will help deploy and operate websites that are used by millions of users. You'll be part of a cross-functional team creating robust, performant software that operates at vast scale.

What are the responsibilities?

- Write code (React, Javascript, node, webpack, CSS, HTML etc) to be deployed onto AWS infrastructure
- Code review your peers' work and promote best practices within the team

Are you the right candidate?

As an organisation we support all of our colleagues in gaining new skills and experience. To be successful in this role you may have experience of some, but not necessarily all, of the following:

- Good working knowledge of JavaScript (ideally with React, but training will be provided) with ambition to become a specialist
- Experience with node.js
- HTML and CSS proficiency in a monolingual site, although knowledge of internationalisation would be ideal
- Have built websites from local environment into production
- Experience with a framework other than React (not necessarily JS)
- Awareness of test driven development (TDD) and/or behaviour driven development (BDD)
- Awareness of CI/CD - what it is, how it works
- Some knowledge of cloud computing - e.g. AWS - would be a plus
Terms extraction - example

**Electrical Engineer**

Brilliant opportunity to work as an Electrical Engineer for a leading global cleantech integrator and renewable energy asset developer, owner and operator.

This company is one of the leading renewable energy and energy efficiency companies with over 70 offices worldwide.

This will suit Electrical Engineers with a background in renewable systems looking to work in the renewable industry on exciting clean technology projects.

**Key Responsibilities**

- Electrical Engineer is responsible for working on assignments covering all aspects of industrial and commercial energy usage, energy savings, energy storage, utility plant redevelopment and CO2 emission reduction
- Conceptual design of energy related projects
- Formulate, evaluate and prepare designs and specifications of industrial and commercial schemes during feasibility studies, scheme detailed design and project implementation
- Design covering combined heat and power, refrigeration, Air Source and Ground Source Heat pumps, HVAC, boilers, compressed air, Solar PV, Wind Generation, Industrial control schemes.

**Background Required**

Experienced Electrical Engineer with minimum 3 years

Experienced with

- Battery storage,
- Solar PV,
- Power systems

**Identification of online job vacancy language**

- English

**Search for Green Terms**

- Cleantech
- Renewable energy
- Energy efficiency
- Clean technology
- Energy saving
- Energy storage
- Combined heat and power
- Solar PV
- Wind generator

**Association with Green Family**

- Sustainable production
- Sustainable energy
Results: “Green skills” is new dimension
Results: Green skill dashboard

https://solutions.lightcast.io

User: training@etf.com
Password: ETF_training_2022
Demand for remote work
Is a benefit?

Job Type: Freelance
Salary: £1,000.00-£2,000.00 per month
Additional pay:
- Commission pay
Benefits:
- Flextime
- Work from home
Schedule:
- Monday to Friday
Application deadline: 18/08/2022
Reference ID: UKR984

Hiring Insights
2: Hiring 5 candidates for this role
Job activity
- Employer reviewed job 8 days ago
- Posted 15 days ago
15 days ago

Full Job Description
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Software developer - UK Data Service

Is a job location?

Salary: From £33,000 per annum negotiable depending on experience.

We are a small team who provide access to census and international data, and evidence and...

Full Job Description

Software Developer - UK Data Service
Salary: From £33,000 per annum negotiable depending on experience
Contract: Permanent
Location: Hybrid - flexibility to work from home or at any of our main hubs (London, Bristol, Manchester and Harwell)

Jisc is the UK higher, further education and skills sector’s not-for-profit organisation for digital services and solutions. We believe education and research improves lives, and technology improves education and research.

Our vision is for the UK to be a world leader in technology for education and research...
Demand for remote work

How much Remote Work is present in each Labour Market?

Presence of remote working mentions in online job vacancies

What are the key words to search for?

Two step approach

Selection by Domain Expert

Validation and integration by Country Experts
• English, Ukrainian, Italian, Polish, Czech, Estonian, French, German, Latvian, Lithuanian, Slovak, Spanish and Russian taxonomies were defined.
• The set of terms is language dependent: each language has its own terms, localized and reflecting specific terminology and culture
Terms extraction

Definition Remote Work related Terms

Information extraction → Identification of online job vacancy language → Search for Remote Work related Terms
Terms extraction - example

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- Experience with a framework other than React (not necessarily JS)
- Awareness of test driven development (TDD) and/or behaviour driven development (BDD)
- Awareness of CI/CD - what it is, how it works
- Some knowledge of cloud computing - e.g. AWS - would be a plus
Terms extraction - example

Software Developer
South East · Remote
£40,000 a year - Full-time, Permanent

We are looking for Software Developer to be a part of a team in THEIA. This role can be home based anywhere in UK.

THEIA is a cloud-based integrity management solution, developed by Penspen. It has been designed to provide timely and critical information, initially for the safe and efficient running of pipelines.

Main Purpose of Role:
This role will form part of a team responsible for developing engineering assessments which will predominantly be written using python programming language.

The engineering assessments developed by the team will be implemented within our cloud-based architecture, in many cases this will require development of new methodologies for solving the engineering challenges faced by energy infrastructure as identified by Penspen’s global business.
Results: “Remote work” is new dimension

- Occupation
- Education level
- Sector / industry
- Knowledge, skills, attitudes
- Contract type
- Experience
- Place
- Remote Work
### Results: different distributions

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematicians, actuaries and statisticians</td>
<td>41.00%</td>
</tr>
<tr>
<td>Information and communications technology users</td>
<td>25.43%</td>
</tr>
<tr>
<td>Software developers</td>
<td>23.50%</td>
</tr>
<tr>
<td>Applications programmers</td>
<td>22.01%</td>
</tr>
<tr>
<td>Web and multimedia developers</td>
<td>22.01%</td>
</tr>
<tr>
<td>Contact centre salespersons</td>
<td>19.77%</td>
</tr>
<tr>
<td>Graphic and multimedia designers</td>
<td>17.72%</td>
</tr>
<tr>
<td>Information and communications technology ser..</td>
<td>17.56%</td>
</tr>
<tr>
<td>Research and development managers</td>
<td>17.10%</td>
</tr>
<tr>
<td>Advertising and marketing professionals</td>
<td>17.02%</td>
</tr>
<tr>
<td>Retail and wholesale trade managers</td>
<td>15.08%</td>
</tr>
<tr>
<td>Translators, interpreters and other linguists</td>
<td>14.48%</td>
</tr>
<tr>
<td>Personnel and careers professionals</td>
<td>14.40%</td>
</tr>
<tr>
<td>Industrial and production engineers</td>
<td>13.97%</td>
</tr>
<tr>
<td>Town and traffic planners</td>
<td>13.12%</td>
</tr>
</tbody>
</table>
Results: analysis over time

Remote time

Delta vs 2022/01
Results: Remote work dashboard

Remote Work Share

- 5,24%
- 126,782

Select the Occupation that you want to Analyze (then select it again to reset your choice)

- Mathematicians, actuaries
- Visual artists
- Enquiry clerks
- Database and network pr.
- Journalists
- Software developers
- Web and multimedia deve.
- Applications programmers
- Contact centre operators
- Information and communi.
- Information and communi.
- Town and traffic planners
- Education managers
- Retail and wholesale trad.
- Personal and support prov.
- Research and development
- Client information worker
- Industrial and production
- Advertising and marketi.
- Graphic and multimedia d.
- Sales demonstrators
- Economists
- Translators, interpreters
- Legal and related associ.
- Systems administrators
- Finance managers

Number of remote work OJV

Share of remote work by region

Share of remote work by industry

Education
- Information and communi.
- Professional, scientific
- Wholesale and retail trad.
- Administrative and sucs.
- Financial and insurance ec.
- Transportation and stor.
- Manufacturing
- Arts, entertainment and/or.
- Real estate activities
- Other service activities
- Accommodation and food
- Human health and social
- Construction
- Mining and quarrying
- Electricity, gas, steam en.

Share of remote work by release date

User: training@etf.com
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