



Technological trends, technology adoption, investment and competences in advanced technologies

The development of the professionals of the future will require a combination of advanced, digital and transversal professional competences. The combination of different competences will not only be relevant for the future of organizations, but also for each individual, as each one of us must qualify in order to keep up with emerging technologies and address the challenges of the labour market. The competences associated with new technologies are creating new paths and opportunities across all professional areas. A professional in the area of finance, for example, can develop competences at the level of AI (Artificial Intelligence) and thus create new opportunities to improve their performance. This is an alternative vision towards the prevalent vox populi that associates

the new technologies with the extinction of some jobs and the substitution of humans by machines..

In a recent overview of the demand for new and emerging professions and competences the European Union (EU) launched the "Report on technological trends, technology adoption, investment and competences in advanced technologies", offering a discussion about the impacts of technologies on the demand for professionals and competences.

The report makes an in-depth analysis, exploring trends in the generation and uptake of advanced technologies, related business activities and competences. It brings together several data sources in order to monitor advanced technologies and their applications in industry across the EU-27 and in the economies of

key competitors.

The research about such advanced technologies, build on information from LinkedIn network, monitoring the number of online job ads that require specific competences. The automotive sector stands out for the high demand exhibited for digital technologies, IoT (Internet of Things) and Micro Electronics. In engineering the demand for robotics stands out. In the banking sector, which has been a pioneer in the applications of Blockchain technology, the data confirms the current and future demand for this technology. The competencies related to data analysis (cloud and Big Data) are, as expected, highly sought after by sectors where information is an important asset, namely in banking and financial services.



Smart Cities - Concepts and benefits

Smart Cities are the result of the use of Information and Communication Technologies (ICT) through technological systems and tools and their application to urban projects. The use of sensors, monitoring systems, wireless networks, autonomous devices and mobile applications, allows data collection is taking place at an unprecedented pace, and offers immense support for the development of new solutions to address social problems to improve the quality of life of citizens.

Smart Cities encompass intelligence

in the human and collective spheres through the pillars of innovation, public management, sustainability, inclusion and connectivity.

The developments of new technologies has provided an increase in interactivity in the daily lives of citizens. Innovative solutions in different areas of the urban environment have been presented, with the aim of optimizing relations between the community and the services, public and private, that exist in the territory.

Intelligent solutions optimize public

services through the analytical management of information about where resources are being consumed.

This data enables better monitoring and management by the municipality and allows citizens to make more conscious use of it, reducing operational maintenance costs and increasing the life span of existing infrastructure. A Smart City uses the technology to provide a new way of living in the city.

The success for a city to become truly intelligent lies in the importance of its inhabitants as the main sources of information.

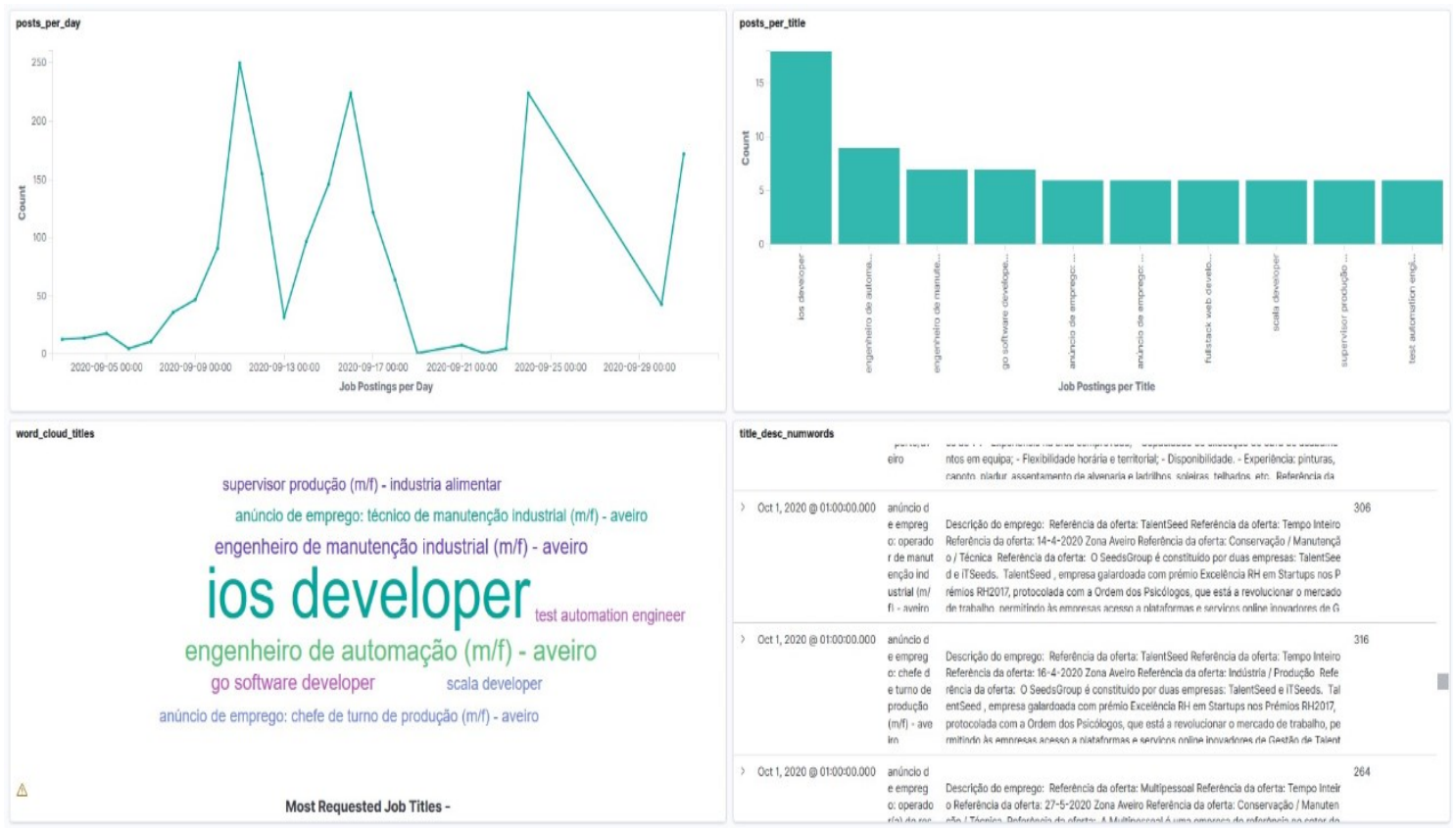


In the next few days...

The Aveiro Labour Observatory will be present at Aveiro Tech Week conducting a Workshop that will take place on October 16th between 10h30 and 12h00. The Workshop promoted by the Aveiro Labour Observatory will take place at the Aveiro Hub, located on the 2nd floor of the Atlas Aveiro building. The session will have a limited capacity, dictated by the current circumstances, but may be followed in live stream, by Youtube and Facebook. For more information please follow the updated trough our social networks.

This will be a great opportunity to learn more about the work that the Observatory has conducted in recent months, but also to get to know a new tool that the Research Team of the Labour Observatory is developing, and to provide inputs and collaborate in the discussion of its functionalities. In this context the work in progress will be presented about the development of an innovative Dashboard that integrates and analyzes job offers from different sources of recruitment, thus being an agile way to aggregate information in real time on the dynamics of job offer and competences demand.

Figure 1 – Dashboard analyze job offers



Have you thought about how data analysis can help your company's recruitment?
We would like to know your opinion and count on your contribution in the development of this tool!

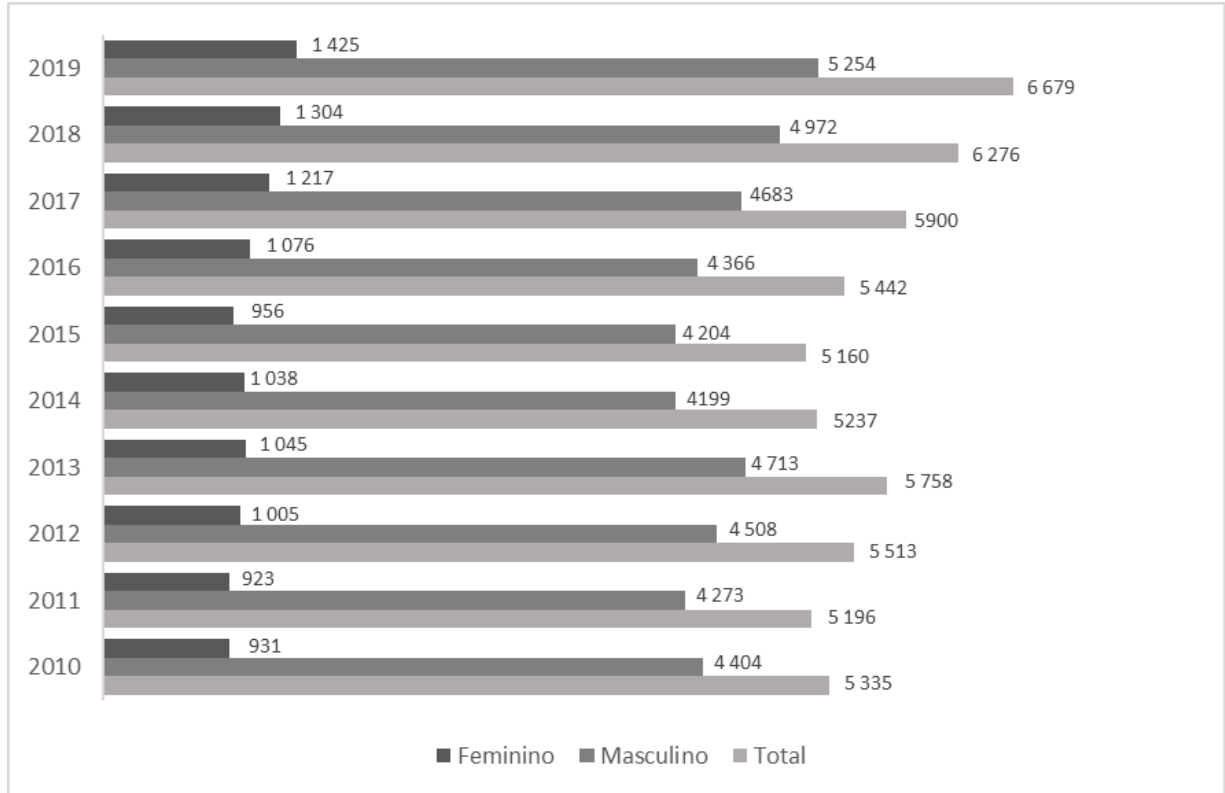


Did you know?

The Directorate General of Education and Science Statistics report, the results show a discrepancy of graduates by gender. (DGEEC) is a central service under the State's direct administration, with administrative autonomy, whose mission is to guarantee the production and analysis of statistics in the field of education and science. The information related to the "Statistics for Education 201/2019" is related to children/students, teaching staff and non-teaching staff, in pre-school, primary and secondary education and higher education. The data refers to Portugal (the mainland and the Autonomous Regions of the Azores and Madeira). Concerning the info about to graduates in Information and Communication Technologies (ICT) higher education presented in the

This is a problem that not only affects Portugal. In 2015, 1.4 million people decided to follow ICT studies in the European Union, but women represented only 17.2% of such students. In 2019, out of 6679 ICT graduates in Portugal only about 21% were women. This reality deserves the attention of policy makers. At a time when the digital economy and the technology sector are rapidly expanding and with a growing number of hiring is expected, the reduced number of women in the technology sector may limit the existence of qualified professionals in this area, spilling over into the growth and development of the sector itself.

Figure 1 – Graduates in Information and Communication Technology (ICT) higher education by gender



Source: DGEEC—Statistics for Education 2018/2019

- To learn more about the Aveiro Labour Observatory: <http://observatoriodoemprego.web.ua.pt/>
- To learn more about the Urban Innovative Actions: <https://www.uia-initiative.eu/en/uia-cities/aveiro>
- To learn more about the project: <https://www.aveirotechcity.pt/pt/atividades/observatorio-do-emprego>
- Would you like to receive more information? Register and receive the newsletters: observatoriodoemprego@ua.pt

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Main Urban Authority: AVEIRO CÂMARA MUNICIPAL, TECH CITY
Delivery Partners: altice, instituto de telecomunicações, INOVARIA, universidade de aveiro, CEDES
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