## EMPOWERING WOMEN IN IT: DRIVING INNOVATION AND DIVERSITY

The field of information technology (IT) has traditionally been dominated by men, but there has been a noticeable increase in women's involvement in recent times. This shift has sparked discussions about equality, diversity, and the role of women in shaping the future of technology. One crucial aspect of engaging women in the IT industry is recognizing their valuable contributions to innovation and problem-solving.

Ada Lovelace, a mathematician from London, is widely regarded as the first female programmer in history. In her honor, the high-level programming language Ada was developed. It shares similarities with Pascal but requires a more disciplined programming approach. The United States Department of Defense initiated the development of Ada in 1983 for use in real-time systems. It is primarily used for software development in military installations and large, complex projects that prioritize safety and reliability.

The contribution of women to IT will never end, and the ranks of women professionals will continue to grow. Indeed, today there are still more male professionals in STEM, but the number of women in IT is constantly growing.

In 2012, there were 7% of women in this field;

In 2021, it is already more than 22%.

They found successful companies, hold the positions of CEO and VP, and manage regional branches of well-known companies. The Forbes list of successful women in IT is constantly updated and expanded.

Despite the progress made, women in IT still face various challenges. Gender biases and stereotypes persist, creating barriers to access and advancement. Additionally, the lack of female role models and mentors in the field can make it difficult for women to have a successful IT career. Work-life balance issues and the predominantly male culture of many tech companies may also discourage women from pursuing careers in IT.

To address these challenges and promote greater gender diversity in the IT industry, it is crucial to implement policies and practices that support the recruitment, retention, and promotion of women. This includes initiatives like mentoring programs, diversity training, flexible work arrangements, and eliminating unconscious bias in hiring and promotion processes. Creating an inclusive and supportive work environment where women feel valued and empowered is essential for building a more diverse and innovative tech workforce.

In summary, women play a vital role in the IT industry, bringing unique perspectives and skills necessary for driving innovation and progress. While significant progress has been made in recent years, there is still much work to be done to overcome the challenges and barriers that women face in this field. By promoting inclusivity, providing support and advancement opportunities, and challenging gender stereotypes, we can create a fairer and more dynamic IT industry that benefits from the full participation of women.

> Scientific supervisor: Nataliia DENYSENKO, Senior Lecturer