Career opportunities and essential skills for CSE graduates in a changing tech landscape

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Abstract

Example abstract for the Physics Open journal. Here you provide a brief summary of the research and the results.

Keywords: keyword 1, keyword 2, keyword 3, keyword 4

1. Introduction

1.1. Background

Industries have evolved because of rapid technological advances, which has created demand for skilled CSE professionals. Because technologies like cloud computing, big data analytics, artificial intelligence, and the Internet of Things today support daily living and manufacturing processes, modern technological skills is necessary. Industry 4.0 and the digital economy are compelling higher education institutions to revise their academic programs to equip graduates with the competencies needed in evolving workplaces [1] . In addition to fundamental programming skills, data analytics, machine learning, and cybersecurity competencies are now essential for CSE professions. New graduates need to continue learning to remain relevant due to the fact that technology is changing so rapidly [2] . In addition to technical skills, employers also highly regard soft skills such as teamwork, communication, problem-solving, and adaptability. These skills are presently viewed as key drivers of career success on par with the level of sector-specific knowledge for most employers [3] . Even amid strong demand in fields such as Bangladesh's IT sector, where job placement for CSE graduates reaches as much as 77 percent, a gap in skills between education by schools and industry remains. Most graduates do not possess up-to-date, industry-relevant skills or in-job experience that restricts their own likelihood of direct employability without additional training [4] . New global career paths are being opened to individuals who acquire proficiency in emerging fields such as data science and artificial intelligence. As CSE graduates drive innovation and digital transformation in every sector of the global economy, it is crucial to solve these problems [5] .

1.2. Motivation

In light of IR 4.0, Malaysian researcher Poh Kiong Tee [6] provides an essential perspective on the digital skills required and the talent deficits.The results of the investigation refuted the notion that eagerness to pay for microcredentials has a modulating impact on employability. The present study verified how well microcredentialing fills digital skill gaps; future research will concentrate on other digital skill domains that affect graduate employability. This research confirms how entry-level graduate employees' employability is impacted by microcredentials and digital skills.These findings suggest that educational programs should put development of these competencies first so as to better get pupils ready for the workplace.Employers could also profit from recognizing the need of microcredentials in assessing prospective candidates. Mehrdad Maghsoudi [7], Four different skill groups were found inside the network: Generalist, Infrastructure and Security, Software Development, and Embedded Systems.Generally, the research offers insightful information on the present condition of the computer science job market and can help individuals and companies make wise decisions regarding skills development and Professionals looking for employment or career growth in the computer science field should consider acquiring these highly sought-after skills to boost their employability and job prospects.For the CSE Department students looking for jobs, this paper is so good; but, this work can be more grand since the CSE industry is not constrained by these four clearly defined abilities. Cheng Peiwen [8] conducted a research where he write AI affects several sectors quite differently, though lowskilled jobs are fast being replaced, the demand for highskilled ones and fresh roles is growing, therefore changing the job market toward a more intelligent one with advanced countries and hightech sectors adjusting fast to this change while less developed areas and conventional industries are under more pressure to transform. The dynamic and complex link between artificial intelligence and employment requires multiple studies to guarantee that technical developments improve the job market.Future studies could assist to assess the efficacy of current rules and to measure the effects of artificial intelligence on the job market in several sectors and locations using empirical analysis.In many ways, artificial intelligence and employment are related; thus, in several methods, these links have to be investigated to guarantee that technological advancements support the job market.

2. Title 2

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M 82	09:55:52.725,	+69:40:45.78	269 ± 2

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5. Summary and conclusions

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Acknowledgements

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Appendix A. Appendix title 1

Appendix B. Appendix title 2

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