Do Data Science Degrees in Sri Lanka Fullfil the Needs of the Job Market?

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This study has investigated the alignment between the contents of data science undergraduate degree programmes and the data science job market prerequisites in Sri Lanka. The analysis focused on identifying the fundamental elements of these degree programmes and the skills needed for different data science career positions. The study utilised document analysis to analyse the contents of curricular of 10 degree programmes and 15 job descriptions. Frequency and thematic analyses were used to identify patterns of curricular contents and job competencies. The findings suggest that although the majority of degree programmes prioritise the development of programming and statistical competencies, they frequently neglect to provide hands-on experience with essential tools such as Power BI, SQL, and cloud technologies required by the job market. This discrepancy indicates a requirement for improving the curricular in order to more effectively equip graduates for the demands of the industry. The results of our study offer insights to educational institutions on how data science degrees should be developed/revised based on industry requirements.

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