**SIT 799**

**Task 10.1: What new AI-related jobs will be created?**

## Introduction

Last two decades have seen unprecedented growth in Artificial Intelligence (AI) Systems across various verticals. This revolution is based on increased computational capabilities and organically generated data. Owing to these factors, theoretical concepts are now being implemented with ease and organically generated data is acting like a fuel to this phenomenon. From healthcare [1], smart cities [2] and even to areas like space exploration [3] AI has been assisting humans in faster iterations of technological advancements. While these cutting-edge applications help in presenting a strong case for AI, the grimmer side of these advancements are the threat to jobs. Routine tasks like customer support and manufacturing are now being automated with an increased rate owing to lower business cost and greater productivity. [4] shows the group of jobs which are most likely to be affected by this change and have surplus resources which might be rendered redundant. On the brighter side, AI promises creation of new job functions which will help human race take the next evolutionary step. Now more than ever, there is an increased focus on having better trained models which can assist humans in their daily tasks. Train such AI models require critical human supervision and feedback loop to attain and surpass real world acceptable evaluation metrics. This report focusses on one such job function, Algorithm Bias Auditor.

## Algorithm Bias Auditor

Recent studies [5] have shown that AI algorithms are prone to inheriting the bias present in humans. This leads to sub optimal and sometimes even dangerous scenarios like false incrimination [example show such a scenario because of bias in face recognition systems [6] , [7]). The primary job function of an Algorithm Bias Auditor would be to evaluate existing bias in public and private AI models to ensure principle of *fairness* is upheld in real world settings where AI systems are deployed.

Recent legislative measures indicate a strong push from both business and government stakeholders to monitor the way AI systems impact the society. World economic forum in [8], features the role of Algorithm Bias Auditor in top 10 future jobs due to AI. We need a dedicated person as an Algorithm Bias Auditor because as the AI systems grow in sophistication and accrue humongous data from a variety of sources, the task to monitor and report bias would become increasingly nontrivial because of the nature of human biases. This would need human intervention in addition to tools deployed to monitor such AI biases.

Professionals with background in computer science especially with specialisations in domains such as data science and analytics would be the primary candidates for this job function. Owing to their familiarity with handling data-based systems, such professionals can be quickly upskilled and trained to take up the responsibility of an Algorithm Bias Auditor. Because of the technical skills involved in auditing AI models also overlap with the domain of software testing, QA professionals and software testers would also be ideal candidates for the role of Algorithm Bias Auditor. An Algorithm Bias Auditor would need to be a junior to mid-level experienced professional in these domains. This shows how an existing pool of professionals who are prone to being affected by AI [9] can be trained to perform novel job roles of the future.

## Conclusion

This report highlights the impact of AI on the future of jobs and goes on to explore the role of Algorithm Bias Auditor. The report presents a strong case of sustainable AI ecosystem in which novel job functions can be created using an existing resource pool, thus mitigating the effect of job redundancy due to AI automation of routine tasks.

## References


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