



# ALY 6080: INTEGRATED EXPERIENTIAL LEARNING

## Assignment 3:

The Evolving Landscape of the Recruitment Industry:  
Investigating How Artificial Intelligence Can Eliminate Hiring  
Bias in the Recruitment and Selection Process

## Submitted To:

Dr. Chinthaka Pathum Dinesh, PhD, Prof. Herath Gedara,  
Faculty Lecturer

## Submitted By:

[Abhilash Dikshit](#)

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Graduate Student at Northeastern University, Vancouver, BC,  
Canada

Master of Professional Studies in Analytics

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Gomber, P., Legner, C., Huyskens, C., & Wunderlich, P. (2020). Optimizing Recruitment Process with Data-Driven Decision Making. *Journal of Computational and Theoretical Nanoscience*, 17(9), 4552-4558.  
<https://doi.org/10.1166/jctn.2020.9086>

**Summary:**

The article explores the role of data-driven decision making in the recruitment process, and how it can optimize the hiring process. The authors argue that data analytics can provide insights into the candidate pool, improve decision-making, and increase the quality of hires. They suggest that recruitment analytics can be used to analyze resumes and cover letters, track candidate behavior on the company's website, and conduct sentiment analysis on social media data.

The authors conducted a case study with a German logistics company, analyzing data from the recruitment process of 3,000 job applicants. They found that data analytics can help to identify key candidate characteristics and patterns that lead to successful hires. Moreover, data-driven decision making can help recruiters to prioritize their efforts and reduce the time-to-hire.

**Possible Analysis:**

A possible visualization for the findings of the case study could be a scatter plot, where the x-axis represents the key candidate characteristics, and the y-axis represents the patterns that lead to successful hires. Each candidate is represented by a point on the scatter plot, and the color or shape of the point could indicate whether they were successfully hired or not. The plot could reveal clusters or trends that suggest which candidate characteristics and patterns are more likely to result in successful hires.

Another possible visualization could be a Gantt chart that shows the time-to-hire for each job applicant in the recruitment process. The chart could be color-coded to indicate the time spent on each stage of the process, such as reviewing resumes, conducting interviews, and performing background checks. This visualization could help recruiters to identify bottlenecks or inefficiencies in the recruitment process and adjust their efforts accordingly to reduce the time-to-hire.

**Relation to business question:**

The article is related to the business question of how data analytics can be used to optimize the recruitment process. The authors provide a case study demonstrating the potential benefits of using data-driven decision making in the hiring process. The article highlights the importance of leveraging data analytics to make informed decisions and improve the quality of hires. Companies can benefit from this article by learning about the tools and techniques available for recruitment analytics and implementing them in their hiring process.