10-STEP INTERDISCIPLINARY RESEARCH PROCESS BY AMARI BROWNE JOHNSON
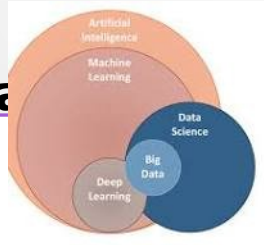
Step 1 Define problem

"What are the major ways artificial intelligence has been effective in preventing data breaches and minimizing threats?"

Step 2: Justify Using an Interdisciplinary Approach.

Explain how AI, cybersecurity, and data science each provide unique perspectives and tools for addressing data breaches.

Step 3: Identify Relevant Disciplines

Identify the disciplines involved: Computer Science (AI), Information Technology (Cybersecurity), and criminology.

Step 4: Conduct the Literature Search

Conduct a thorough literature search in each identified discipline to gather relevant information on AI techniques, cybersecurity measures, and data science methods.

Step 5: Develop Adequacy in Relevant Disciplines

Develop a strong understanding of the key concepts and methods in each discipline, such as machine learning algorithms in AI, encryption methods in cybersecurity, and data analytics in data science.

Step 6: Analyze the Problem and Evaluate Insights

Analyze how AI has been used to prevent data breaches by evaluating case studies and research findings from each discipline.
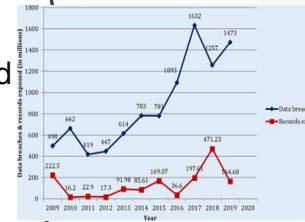
Step 7: Understand Integration

Understand how to integrate insights from AI, cybersecurity, and data science to form a cohesive understanding of AI's effectiveness in preventing data breaches.

Step 8: Identify Conflicts Among Insights and Their Sources

Identify any conflicting insights or theories from the disciplines of Computer Science, Information Technology (Cybersecurity), as well as criminology and determine their sources.

Step 9: Create Common Ground Among Insights: Concepts and/or Assumptions

Create common ground by reconciling conflicting concepts and assumptions from the different disciplines.

Step 10: Construct a More Comprehensive Understanding or Theory

Construct a comprehensive understanding of how AI can effectively prevent data breaches by synthesizing insights from AI, cybersecurity, and data science.