



ICTSS00120 - Artificial Intelligence Skill Set

Session 6: Evaluating Machine Learning Opportunities

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Learning Objectives

- Identify and document machine learning opportunities in various domains.
- Evaluate the advantages and disadvantages of AI, ML, and DL technologies.
- Apply industry-recognized ML principles and techniques to real-world scenarios.
- Discuss datasets useful for automating work tasks.

Identifying ML Opportunities

- Understand the business context and goals.
- Identify tasks that can benefit from automation.
- Explore potential data sources and requirements.

Key Questions:

- What processes are repetitive and data-intensive?
- What business outcomes could be improved through automation?

Documenting ML Opportunities

- Clearly outline the benefits of automating tasks.
- Consider both short and long-term impacts.
- Align opportunities with organizational objectives.

Discussion:

- How would automating this process impact workflows?
- What are the measurable benefits?

Evaluating AI, ML, and DL

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| <ul style="list-style-type: none">• Advantages (e.g.):<ul style="list-style-type: none">• Increased efficiency• Enhanced decision-making• Cost reduction• More accurate• Data Efficient | <ul style="list-style-type: none">• Disadvantages (e.g.):<ul style="list-style-type: none">• Implementation complexity• Potential bias• Ethical considerations• Data hungry• Resource intensive |
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Industry-Recognized ML Principles

- **Data-driven Decision Making :**
 - Use data to drive model creation and evaluation.
- **Transparency and Accountability :**
 - Maintain clear audit trails and model interpretability.
- **Continuous Monitoring and Updating :**
 - Regularly update models to ensure relevance.

In-Class Activity: Group Peer-Review

1. With the person next to you.
2. Share the problem you have identified. (Part 1 of assessment 1.)
3. Discuss potential datasets that might exist and identify possible target attributes.
4. What challenges might present themselves in obtaining data?

Next Steps

- Work on completing Tasks 2, 3, and 4 for Assessment 1 in class.
- Prepare to present findings in Week 7.



Questions & Answers

