Department of Computer and Information Sciences

Faculty of Computers and Information Technology



AI Research Assignment 3 Guidelines

• Course: Artificial Intelligence (ITCS4312)

• Lecturer: Shadia Yahya Baroud

Assignment Title: Research on Emerging Trends in AI

- Objective:

This assignment aims to enhance students' understanding of cutting-edge AI techniques, foster critical thinking and develop research and presentation skills. Students will explore recent advancements in AI, analyze their impact and present their findings.

- Assignment Details:

1. Topic Selection:

- o Choose a recent AI advancement or application from the following areas:
 - Machine Learning (ML)
 - Deep Learning (DL)
 - Natural Language Processing (NLP)
 - Computer Vision
 - Reinforcement Learning (RL)
 - Ethical AI and Bias in Algorithms

2. Report Requirements:

o Length: 5 pages (excluding references, diagrams and appendices)

o Format:

• Font: Times New Roman, 12pt

• **Spacing:** 1.5 line spacing

• **Citations:** Use **APA** format for references.

Sections to Include:

- 1. **Introduction:** Define the problem and the importance of the AI technique.
- 2. **Literature Review:** Summarize key research papers, frameworks and technologies related to the topic.

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- 3. **Analysis:** Discuss how the chosen AI technique improves upon traditional methods. Include any performance metrics or case studies if applicable.
- 4. **Applications:** Describe real-world use cases and industries where this AI technique is applied.
- 5. **Ethical Considerations:** Address potential biases, privacy concerns, or societal impacts.
- 6. Conclusion: Summarize key findings and propose future directions.

3. Presentation:

- o Prepare a **15-minute presentation** summarizing your research findings.
- Use **PowerPoint, Canva or Google Slides** with visual aids like graphs, charts and diagrams.
- o Ensure clarity, conciseness and professional delivery.

4. Use of AI Tools:

- o If you utilize any **AI tools** (such as ChatGPT, Grammarly or other AI-assisted writing tools) for research, writing or presentation, you must **clearly specify** which tools were used and how they contributed to your work.
- Failure to disclose the use of AI tools may result in deductions from your final grade.

- Submission Details:

- Deadline: TBD
- **Submission Format:** Submit both the **PDF report** and **presentation slides** on the course platform.
- Late Submissions: Late submissions will incur a penalty unless prior approval is granted.

- Grading Criteria:

Criteria	Weight
Research Depth	30%
Critical Analysis	25%
Clarity and Structure	15%
Presentation Quality	15%
Citations & References	10%
Originality	5%

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- Additional Notes:

- Collaborations are allowed in the form of peer discussions, but each student must submit an individual report.
- Plagiarism will result in disqualification. Ensure all sources are properly cited.

For any questions or clarifications, please contact **shadia.baroud.research@gmail.com** or visit during e-office hours.

Good luck and I look forward to seeing your innovative research!