CPE 703: Research Methodologies

Research Report and Presentation

Objectives

- Develop the ability to formulate **research problems**.
- Develop skills to **search for sources** and **engage sources** to answer formulated research problems.
- Develop enhanced **writing** and **presentation skills**.

Procedure

- **Select** an **active research problem** in Artificial Intelligence, Robotics, or Computer Engineering.
- **Areas**: Machine Learning, Robotics, Computer Architecture and Organization, Computer Networks.
- **Define** your **research problem**.
- **Survey original** and **recent research** papers.
- **Develop** a **proposal report** for the selected research problem.
- **Present** your **proposal**.

General

- **Marks**:   30%
  - Report   15%
  - Presentation   15%

- **Timing**
  - **After midterm**: Submit definition of selected research problem
  - **Last week**: Submit research proposal report and present your proposal

Research Problem Definition

- **One-page** document

- **Specify**
  - Research title
  - Student Name
  - Research topic
  - Main question
  - Significance

- **Example**:

1. I am studying applying deep learning and transfer learning to Arabic poetry

2. because I want to find how to automatically diacritize poetry accurately,

3. in order to help my reader enjoy readying and chanting poems.

Research Proposal Report

- **4 to 8-page** report
- Use the template and follow the University of Jordan **style** specified in the following guide:

<div align="center">

مواصفات كتابة الرسائل الجامعية

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- **Contents**
  - Title and student name
  - Introduction and Background
  - Research Problem
  - Research importance
  - Research objectives
  - Research questions and assumptions
  - Previous work
  - Research methodology
  - References

Research Proposal Presentation

- Prepare Power Point slides (around **ten slides**)
- **Ten** minutes
- Must be **clear** and **useful** presentation