**Department of Electrical Engineering**

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| **Faculty Member:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **Dated: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
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| **Course/Section:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **Semester: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
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**CS-477 Computer Vision**

**Lab#9: Project\_Intial submission**

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|  |  | **PLO4-CLO4** | **PLO5-CLO5** | **PLO8-CLO6** | **PLO9-CLO7** |
| **Name** | **Reg. No** | **Investigation**  **(5 marks)** | **Modern Tool Usage**  **(5 marks)** | **Ethics**  **(5 marks)** | **Individual and Team Work**  **(5 marks)** |
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**Lab#9: Implementation of a simple CNN on Pytoroch**

**Objectives**

* Write semester project abstract.
* Write the methodology.
* Create the block diagram.
* Create GitHub repo for the project.

**Lab Instructions**

* This lab activity comprises of following parts: Lab Exercises, and Post-Lab Viva/Quiz session.
* The lab report shall be uploaded on LMS.
* Only those tasks that are completed during the allocated lab time will be credited to the students. Students are however encouraged to practice on their own in spare time for enhancing their skills.

**Lab Report Instructions**

All questions should be answered precisely to get maximum credit. Lab report must ensure following items:

* Lab objectives
* Python codes
* Results (graphs/tables) duly commented and discussed
* Conclusion

Computer Vision Semester project Instructions

1. **Write Semester Project Abstract:**

* Begin with a concise overview of the project, highlighting its significance and relevance.
* Clearly state the problem or challenge the project aims to address.
* Outline the objectives and goals of the project, emphasizing what you intend to achieve.
* Mention the methodology or approach briefly.
* Highlight the expected outcomes and potential impact of the project.
* Keep the abstract clear, concise, and engaging to capture the reader's interest.

1. **Write the Methodology:**

* Provide a detailed explanation of the steps and processes involved in the project.
* Clearly outline the research methods, experimental design, or development strategies you plan to use.
* Discuss any tools, technologies, or frameworks that will be employed.
* Specify the data collection and analysis methods if applicable.
* Include information on any experiments, simulations, or prototypes that will be created.
* Discuss how you plan to validate or test the results of your project.
* Mention any ethical considerations or constraints in your methodology.

1. **Create the Block Diagram:**

* Start with a title and a brief description of the block diagram's purpose.
* Identify and list the main components or modules of your project.
* Use standardized symbols and shapes to represent different elements in the diagram.
* Clearly illustrate the flow of information or processes between the components.
* Include arrows and labels to indicate the direction of data or control flow.
* Organize the diagram in a logical and visually appealing manner.
* Include a legend or key to explain the symbols used in the diagram.

1. **Create GitHub Repo for the Project:**

* Choose a clear and descriptive name as per insturection given below for your GitHub repository.
* Write a comprehensive README.md file that includes:
  + Project title and brief description.
  + Instructions for setting up and running the project.
  + Dependencies and system requirements.
  + Contribution guidelines for other developers (if applicable).
  + License information.
* Organize your code into well-structured directories and follow a consistent naming convention.
* Regularly update the repository with code changes, improvements, or bug fixes.
* Include a license file (e.g., MIT, GPL) to specify how others can use, modify, and distribute your code.
* Utilize GitHub's issue tracker to manage and prioritize tasks, enhancements, or

## Time Line

1. Create a private repository for semester project on GitHub.
2. Name the repository in the following format.

section-project name-group leader name

example group\_leader name\_BEE12x-object recognition

1. In readme of your repository write names and registration numbers of each group member and the abstract and methodology of your semester project
2. Add Lab engineer the as a collaborator repository using the following id so that I can see the contribution from each member.

#### Lab Engineer

#### Email: [kalim.ullah@seecs.edu.pk](mailto:kalim.ullah@seecs.edu.pk)

#### ID: Engr-Kaleem

#### Link: https://github.com/Engr-Kaleem

#### Help: https://docs.github.com/en/account-and-profile/setting-up-and-managing-your-personal-account-on-github/managing-access-to-your-personal-repositories/inviting-collaborators-to-a-personal-repository

1. At the end of project, you will submit a report in a IEEE Access format paper
2. **Complete step following before 24/11/2023 before 11:55 pm**

* Write semester project abstract.
* Write the methodology.
* Create a block diagram.
* Create GitHub repo for the project.

**Deliverable**

* 1. Presentation in last week **26/12/2023-30/12/2023** (upload ppt LMS before before presentation)
  2. Code on GitHub repo (complete before deadline)
  3. Report in IEEE ACCESS format (upload to LMS before presentaion)

**Deadline:28/12/2023**