Reading/Learning seminars in 2025

Fall semester

Schedule

- Time: 1:15 - 2:45 pm, Wednesday
- Dates: Oct 16, 23, 30; Nov 6, 13, 27; Dec 4, 11, 18; Jan 8, 15, 22, 29
- Room: Tachibana-Kaikan (near Koshibo)

Project-Based Learning Initiative: Guidelines and Instructions

This initiative aims to replace traditional book-based learning with hands-on, collaborative projects that allow you to explore advanced concepts in Graph Learning and Image Processing. Here are the detailed guidelines and instructions to ensure your project is well-structured and aligns with the initiative's goals:

1. Group Structure

Total Members: 7 students, divided into two specialized groups.

Group A: students focusing on *Graph Learning Research*.

ArchVision AI: students focusing on *Image Processing Research*.

2. Objective

The primary objective is to foster a shift from passive learning to active project-based learning. This approach enables you to:

- Deepen theoretical understanding through practical application.
- Engage in projects that align with your research focus area.

3. Project Selection

Criteria for Project Selection:

- Relevance to the group’s specific focus area (*Graph Learning* or *Image Processing*).
- Should address a significant problem or explore an innovative concept.
- Feasible to complete within a semester.

Example Project Idea: *Using Neural Architecture Search to find the best architecture for image classification.*

4. Project Execution

Timeline: Projects must be completed within one semester.

Collaboration Platform: Use *GitHub* for version control

Roles of All Members:

- Research relevant papers and source code.
- Contribute to the project's codebase, documentation, and other materials on GitHub.
- Participate in weekly meetings to discuss progress and address challenges.

Individual Responsibilities:

Literature Review: Each member is assigned specific resources to review and present summaries.

Code Implementation: Members focus on different modules or features to ensure full project coverage.

5. Expected Outcomes

Minimum Outcome: Successful replication of a recent research paper to code implementation.

Desired Outcomes (If possible):

Potential publication of robust and novel results in academic journals or conferences.

6. Benefits of Project-Based Learning

After completion:

- Enhance coding and project management skills.
- Develop critical thinking and problem-solving abilities through real-world applications.
- Build a portfolio on GitHub to showcase skills to potential employers.
- Demonstrate teamwork and collaborative skills.

Resilience in Outcomes:

- Even if the project is not publishable, it serves as a valuable addition to your professional portfolio.

7. Project Management and Evaluation

Progress Tracking: Use *GitHub Issues* and *Projects* to manage tasks, milestones, and deadlines.

Regular Check-ins: Weekly meetings for updates, insights, and problem resolution.

Final Presentation: At the semester's end, present the project outcomes, highlighting

achievements, challenges, and lessons learned.

Thank you. Enjoy Learning