UM EECS 542: Advanced Topics in Computer Vision Schedule

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Prerequisites: introductory computer vision, machine learning

Scope: This course aims to not only cover the latest techniques on 2D vision (e.g., image recognition and segmentation), 3D vision (e.g., multiview scene reconstruction), and 4D vision (e.g., dynamic scene synthesis), but also introduce new modeling perspectives behind the development of these tools. In addition to lectures, paper reading and discussions, students will also gain hands-on experience on how to use these tools, visualize and analyze results through a set of homework assignments.

Requirements: This advanced-level course is designed not to teach basic skills in machine learning or computer vision, but to help you grasp advanced computer vision techniques and examine them through both practical application and theoretical analysis. Weekly readings, questions and answers on piazza, active participation in class, and 5~6 homework submissions are required.

Sign-Up: For a registration override, please sign up using this form.

Gradescope: Submit all your homework on Gradescope for this course, linked on your Canvas.

Grading:

1. 65%: Homework (lowest 1 dropped)
2. 20%: Mini-quiz per lecture (lowest 6 dropped)
3. 10%: Participation in class and on piazza
4. 05%: Class feedback

Piazza Rules:

- We use Piazza for discussions on conceptual and technical questions among classmates. There is no anonymity. Please be respectful to your classmates.
- Please post your questions, answers, and comments in dedicated folders.
- Please check Piazza for already posted questions before posting a new one. Unnecessarily clogging up Piazza makes the platform less usable for everybody.
- Please use Piazza for all communications, private or public, as much as possible. Others will benefit from answers and discussions on public questions.
- Piazza is moderated by the teaching staff.

Email Rules:

- Please email syu-eecs542@umich.edu only if the Piazza private channel does not work for you. Emails to individual teaching staff members will be ignored.
- This single contact ensures that your concerns are addressed in a most timely manner, with the clarity of a single voice that represents the entire instruction team.