

Know Your Course

Welcome to Computer Vision

Anand Mishra

Syllabus

Five Modules:

1. Module 1: DIP, ML Brush-up
2. Module 2: Multiview Geometry
3. Module 3: Classical (pre-deep learning) Vision
4. Module 4: DL for CV
5. Module 5: Advanced topics (video, transformers, etc)

Text Book

Richard Szeliski, Computer Vision: Algorithms and Applications
([available for free](#) or purchase)

<https://www.robots.ox.ac.uk/~vgg/hzbook/>

Research papers

Weightage

(In-person)

- Assignment (Programming+H/W): $5 \times 6\% = 30\%$
- Project: $2 \times 15\% = 30\%$
- Minor exam: $2 \times 10\% = 20\%$
- Major exam: $1 \times 20\% = 20\%$

(Online)

- Assignment (Programming+H/W): $5 \times 6\% = 30\%$
- Project: $2 \times 15\% = 30\%$
- Minor exam: $2 \times 5\% = 10\%$
- Major exam: $1 \times 10\% = 10\%$
- Viva/paper review: 20%

Assignment

Release: Week X, Submission: Week X+2, Evaluation: X+3

Release	Submission	Evaluation
Week 1	Week 3	Week 4
Week 4	Week 6	Week 7
Week 7	Week 9	Week 10
Week 10	Week 12	Week 13
Week 13	Week 14	Week 14

Late submission policy

- Each day late: 20% penalty (plan ahead)
- No emails will be entertained regarding extension

Project-1 (Jan 10-March 10)

Closed set of topics:

1. Image Retrieval (Image as query)
2. Handwritten Word Recognition
3. Image Recognition
4. Historical Document Binarization
5. Face recognition

Deliverable: Intermediate proposal (10 points)+6-page report (50 point) + Video demo (20 points) + Slides (10 points)+gitHub code (10 points)

Project-2 (March 10-May 10)

Open area. (you propose a problem and solve it).

Deliverable: Intermediate proposal (10 points)+8-page report (50 point) + Video demo (20 point) + Slides (10 point) + gitHub code (10 points)

Attendance Policy

< 75% attendance and less than C grade = F grade

Attendance will be done in slido. Bring mobile phone.

Academic Code of Conduct

- **I trust students. Do not break my trust. Remember You are an IITian.**
- I expect **academic integrity of highest level** from all CV students.
- I have **no-tolerance policy** against academic misconduct, I will not hesitate to give **F grade** to such students who are involved in copying/cheating during exams/quizzes/problem sets/project/assignments.
- **I have past record of giving 2 grades less to those who were part of some misconduct.**

Grading Policy

- A*: You have to be in **top-1%** students among those whom I mentored or taught in **IIT Jodhpur so far. (Consistent, exceptional in all components, work worth CVPR submission, not easy)**
- A: Exceptional performance in absolute scale, e.g. 90+ out of 100. (and, in top-5%)
- A-: Very good performance in absolute scale (and, in top-10%)
- B/B-/C/C-/D: Relatively graded, with B- or C being average,
- F: If you are honest, it will be not easy for you to get an F :)

When and Where?

Fri: 6-7:30 PM, Sat: 5-6 PM (Slot S)

Room No - LHB 106 (for on-campus students), and Google Meet
(for executive M Tech/Part-time students)

Join Google Classroom

1. Google Classroom: join

yxjhbpt

2. Course Website:

<https://sites.google.com/iitj.ac.in/compvis/home>

Team

Instructor: Anand Mishra (mishra@iitj.ac.in)

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