ECSE 626. STATISTICAL COMPUTER VISION.

Credits: 4

Offered by: Electrical & Computer Engr (Graduate Studies)

Terms offered: Fall 2025

View offerings for Fall 2025 in Visual Schedule Builder.

Description

An overview of statistical and machine learning techniques as applied to computer vision problems, including: stereo vision, motion estimation, object and face recognition, image registration and segmentation. Topics include regularization, probabilistic inference, information theory, Gaussian Mixture Models, Markov-Chain Monte Carlo methods, importance sampling, Markov random fields, principal and independent components analysis, probabilistic deep learning methods including variational models, Bayesian deep learning.

- (3-0-9)
- Prerequisites: (ECSE 205 or equivalent) and (ECSE 415 or COMP 558 or equivalent).

Most students use Visual Schedule Builder (VSB) to organize their schedules. VSB helps you plan class schedules, travel time, and more.

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