CMPT 762 - G100 Computer Vision

Instructor(s): Yasutaka Furukawa

SFU Burnaby

Calendar Objective/Description:
Computer Vision

Instructor's Objectives:
Computer vision is the process of automatically extracting information from images and video. This course covers 1) image classification, object detection, and image segmentation techniques that are based on mostly deep neural networks and to some extent classical techniques; and 2) 3D computer vision techniques, including camera models, calibration, and 3D reconstruction. We will also cover other state-of-the-art deep neural architectures for computer vision applications, such as metric learning, generative adversarial networks, and recurrent neural networks.

Prerequisites:
see go.sfu.ca

Grading:
The grading will be based on 5 coding assignments.

Recommended Books:

Academic Honesty Statement:
Academic honesty plays a key role in our efforts to maintain a high standard of academic excellence and integrity. Students are advised that ALL acts of intellectual dishonesty will be handled in accordance with the SFU Academic Honesty and Student Conduct Policies (http://www.sfu.ca/policies/gazette/student.html).