ELEC 498-Honours Thesis

Term – Spring 2016 (201601)

Instructor
Dr. Alexandra Branzan Albu
Phone: 250-721-8681
E-mail: aalbu@uvic.ca

Office Hours
Days: Wednesdays
Time: 1:30 to 3:30 pm
Location: EOW 307

Title
Automatic detection of sea stars in underwater images of the seafloor

Course description
Investigation and analysis of various methods for object recognition in underwater images. These methods include algorithms for colour-based and shape-based segmentation, as well as supervised machine learning techniques such as support vector machines and neural networks.

Design, implementation, and experimental evaluation of a method for detecting sea stars on various shapes, colour and sizes from an experimental database provided by NOAA.

References:
Articles on computer vision methods, published in academic journals and conference proceedings.

Assessment:
Report 1: 40% Date: 15 February 2016
Report 2: 40% Date: 1 April 2016
Oral presentation: 20% Date: 25 March 2016

The final grade obtained from the above marking scheme for the purpose of GPA calculation will be based on the percentage-to-grade point conversion table as listed in the current Undergraduate Calendar.

There will be no supplemental examination for this course.

Note to Students:
Students who have issues with the conduct of the course should discuss them with the instructor first. If these discussions do not resolve the issue, then students should feel free to contact the Chair of the Department by email or the Chair's Secretary to set up an appointment.

Accommodation of Religious Observance
http://web.uvic.ca/calendar/GI/GUPo.html
Policy on Inclusivity and Diversity
http://web.uvic.ca/calendar/GI/GUPo.html

Standards of Professional Behaviour
You are advised to read the Faculty of Engineering document Standards for Professional Behaviour, which contains important information regarding conduct in courses, labs, and in the general use of facilities.
https://www.uvic.ca/engineering/assets/docs/professional-behaviour.pdf

Cheating, plagiarism and other forms of academic fraud are taken very seriously by both the University and the Department. You should consult the entry in the current Undergraduate Calendar for the UVic policy on academic integrity.
http://web.uvic.ca/calendar/FACS/UnIn/UARe/PoAcI.html

Course Lecture Notes
Unless otherwise noted, all course materials supplied to students in this course have been prepared by the instructor and are intended for use in this course only. These materials are NOT to be re-circulated digitally, whether by email or by uploading or copying to websites, or to others not enrolled in this course. Violation of this policy may in some cases constitute a breach of academic integrity as defined in the UVic Calendar.