CS 795/895 TPCS: Natural Language Processing

Instructor
Dr. Vikas Ashok
Office: E&CS 3107
Office Phone: 757-683-7797
Office Hours: By appointment
E-Mail: vganjigu@cs.odu.edu
Lecture Time: T/R 3pm – 4.15pm
Attendance: Optional. Lectures will be screen-recorded and posted on blackboard
Classroom: TBA

Course Web site:
http://www.cs.odu.edu/~vashok/cs795NLP

Course Description:
NLP techniques are the crux of many leading modern technologies. Advances in NLP are also critical in the pursuit of Artificial Intelligence. This course will discuss core problems in NLP, the state-of-the-art tools and techniques, as well as advanced NLP research topics. At the end of the course, you will be familiar with many language-processing tasks and applications. You will also have gained hands-on experience via an exciting NLP project.

Course Topics:
The course will cover the following topics:
- Language Models.
- Part-Of-Speech (POS) Tagging.
- Syntactic Parsing.
- Word Embedding.
- Information Extraction.
- Text Simplification.
- Text Summarization.
- Question Answering.
- Dialog Systems.

Credits:
3(3-0)

Prerequisites:
Familiarity with Artificial Intelligence and Machine Learning recommended, but not strictly necessary

Textbook:
No textbook required.
Grade Evaluation:
All work will be graded on a numerical scale. Missed homework or exams will receive a grade of zero. The final grade will be the weighted sum of all work using the following weights:
25% Midterm Exam
50% Homework Assignments
25% Final Project
100%. Total

Exams are open books and open notes.
**Late assignments:** Homework should be submitted by 11.59 pm on the due date, unless accompanied by a valid excuse. Late homework is penalized by 5% per day. Homework more than 48 hours late will not be accepted.
Make-ups for graded activities are possible only with a valid written medical or university excuse. It is the student's responsibility to give the instructor the written excuse and to arrange for any makeup work to be done. A makeup exam may be different (and possibly more difficult) than the regularly scheduled exam.

I will follow the rules of the Undergraduate Bulletin for grade assignment.
Final letter grades will be based on the following scale:
- A >= 90, 90 > A- >= 87, 87 > B+ >= 84, 84 > B >= 80, 80 > B- >= 77, 77 > C+ >= 74,
- 74 > C >= 70, 70 > C- >= 67, 67 > D+ >= 64, 64 > D >= 60, F < 60.

**Honor Code**
Please refer to the statement on academic integrity given below.

By attending Old Dominion University you have accepted the responsibility to abide by the honor code. If you are uncertain about how the honor code applies to any course activity, you should request clarification from the instructor. The honor code is as follows:

“I pledge to support the honor system of Old Dominion University. I will refrain from any form of academic dishonesty or deception, such as cheating or plagiarism. I am aware that as a member if the academic community, it is my responsibility to turn in all suspected violators of the honor system. I will report to Honor Council hearings if summoned.”

In particular, submitting anything that is not your own work without proper attribution (giving credit to the original author) is plagiarism and is considered to be an honor code violation. It is not acceptable to copy source code or written work from any other source (including other students), unless explicitly allowed in the assignment statement. In cases where using resources such as the Internet is allowed, proper attribution must be given.

Any evidence of an honor code violation (cheating) will result in a 0 grade for the assignment/exam, and the incident will be submitted to the Department of Computer Science for further review. Evidence of cheating may include a student being unable to satisfactorily answer questions asked by the instructor about a submitted solution. Cheating includes not only receiving unauthorized assistance, but also giving unauthorized assistance.
Students may still provide legitimate assistance to one another. You are encouraged to form study groups to discuss course topics. Students should avoid discussions of solutions to ongoing assignments and should not, under any circumstances, show or share code solutions for an ongoing assignment.

Please see the ODU Honor Council’s webpage for other concrete examples of what constitutes cheating, plagiarism, and unauthorized collaboration. All students are responsible for knowing the rules. If you are unclear about whether a certain activity is allowed or not, please contact the instructor.

**Accessibility Statement**

Old Dominion University is committed to ensuring equal access to all qualified students with disabilities in accordance with the Americans with Disabilities Act. The Office of Educational Accessibility (OEA) is the campus office that works with students who have disabilities to provide and/or arrange reasonable accommodations.

- If you experience a disability which will impact your ability to access any aspect of my class, please present me with an accommodation letter from OEA so that we can work together to ensure that appropriate accommodations are available to you.
- If you feel that you will experience barriers to your ability to learn and/or testing in my class but do not have an accommodation letter, please consider scheduling an appointment with OEA to determine if academic accommodations are necessary.

The Office of Educational Accessibility is located at 1021 Student Success Center and their phone number is (757)683-4655. Additional information is available at the OEA website: http://www.odu.edu/educationalaccessibility/

**Student Resources**

- Online Student Orientation: http://clt.odu.edu/oso
- Blackboard Support Web site: http://clt.odu.edu/bb
- Technical Support Center: http://occs.odu.edu
- Paper Citation Styles: MLA, APA, Chicago, or CBE http://owl.english.purdue.edu/