TopCSCI: Comp Behavior Modeling - 62168 - CSCI 4341

Instructor: Beiyu Lin

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Seminar time: Tuesday 6:30 pm - 9:00 pm (central time)

Zoom Room ID: 758 217 1203

Office hours: 4:00pm-6:30pm (central time) or by appointment.

Course Description

The format of this course is a seminar in which we will read, present, and discuss articles representing the current state of the art in computational biology, as well as foundational articles. Papers will be a collection of "well-known", seminal papers and more recent papers. Each participant will assume responsibility for not only presenting the material of an article, but also initiating, leading, and/or provoking discussion leading to fulfilling the seminar's goal of developing critical skills in assessing ideas, techniques, and applications in the field.

Readings and Course Materials

All readings and course material are available on blackboard.

Grading Policies

Your grade will be determined by three parts:

1. Critical Questions and Summaries of Guest Speakers (100 points)

Critical Questions (50'): You will have one required reading for almost all class periods.

Prior to the beginning of those class periods labeled as critical question due, you are to submit to Blackboard with three sentences as below which demonstrates that you have thoughtfully read and evaluated the paper for the class period. We will use the questions to enrich classroom discussion about the material. The submission page is under the Assignments tab in Blackboard.

Critical questions: one sentence to summarize the paper; one sentence to highlight the innovative part of the paper; one question to suggest the improvement of the paper.

Summaries (50'): We will bring in 4 experts this semester who will talk about state-of-the-art research in data mining and machine learning as well as its applications. You will be required to write a *one-page* discussion of 3 of the 4 invited talks. The summaries are due prior to the beginning of the next class period and are to be submitted to Blackboard. The submission page is under the Assignments tab in Blackboard. The write-up will include:

- i) a summary of the talk and paper (if provided)
- ii) a discussion of how the work fits within the context of the materials being discussed in class
- iii) your ideas about how the speaker's work could be improved or extended in the future

2. Research Poster Presentation (100 points)

You and your team (2-4 people) will present a poster to the class, including study hypothesis and methods as well as innovations and impact of the study.

The presentation will be assessed by the audience members and me. An average will be taken. The grading rubric for the presentation is below. I will bring copies of the rubric each week for you to complete. Rubrics will be turned into the instructor with comments. These will be compiled and given to the presenter with names removed. Student comments regarding the talks of others need to be professional and constructive.

3. Research Paper Writing (100 points)

You and your team (2-4 people) will write 4-5 pages for submitting to conferences.

Total possible points: 300

A = 300-250

B = 250-180

C = 180-100

D = 100-50

F = 50

Learning Objectives for the Course

- Know the form and goals of a research-oriented computer science presentation, as presented in class
- Develop scientific writing skills
- Develop critical thinking
- Develop presentation critiquing skills
- Use critiques in improving presentation
- Engage in discussion with student peers as part of research presentation
- Develop verbal delivery skills for a research-oriented presentation
- Further knowledge of and skills in the use of visual presentation aids
- Facilitate discussion as integral to a presentation
- Understand a topic of computer science research in depth and at the current state of knowledge
- Consider likely future research directions of an area of computer science

*Rubic use for class seminar

| Presenter ⁴ | 's name: | | |
|------------------------|----------|--|---|
| | | | - |

| Your name: | |
|------------|--|

| Organization (20%) | | | |
|---|---|---|---|
| 20 Consistently clear, concise, well organized. Points were easy to follow because of the organization. Transitions between sections smooth and coordinated. Topic Knowledge (20%) 20 Displayed an excellent grasp of | 15 Usually clear, concise, well organized. Most of the presentation was easy to follow. Transitions between sections usually coordinated. 15 Displayed a general grasp of | 10 Not always clear or concise. Organization was adequate, but weak. Occasionally wandered and was sometimes difficult to follow. Transitions between sections weak. 10 Displayed some grasp of the | 5 Often unclear and disorganized, rambled too much. The presentation was confusing and difficult to follow. Transitions between sections awkward. 5 Displayed a poor grasp of the |
| the material. Demonstrated excellent mastery of content, application and implications. Excellent research depth. | the material. Demonstrated good mastery of content, application and implications. Good research depth. | material. Demonstrated adequate mastery of content, application and implications. Research not very deep. | material. Demonstrated a superficial handling of content, application and implications. Little depth of research. |
| Visual Aids (15%) | | | |
| 15 Simple, clear, easy to interpret, easy to read. Well-coordinated with content, well designed, used very effectively. Excellent example of how to prepare and use good visual aids | 11 Usually clear, easy to interpret, easy to read. Generally well-coordinated with content, design was okay, generally used effectively. Demonstrated some understanding of how to use visual aids. | 8 Marginally acceptable, too complex, crowded, difficult to read or interpret. Adequate coordination with content. Used only adequately. Showed little understanding of how to prepare and use visual aids. | 4 Poor quality visual aids (or none), hard to read, technically inaccurate, poorly constructed Poor coordination with content. Used poorly. The presenter did not seem to know how to prepare or use visual aids effectively. |
| Summary (10%) | | | |
| 10 Clear, concise, major points emphasized, clear recommendations, strong conclusion or call for action. | 8 Referred to main points, recommendations weak or missing, weak conclusion or call for action. | 5 Vague mention of major points, no recommendations, weak conclusion, weak or no call for action. | 3 No summary, no recommendations, no conclusions, no call for action. |
| Stage Presence (20%) | | | |
| 20 Excellent stage presence. Confident, used notes well, at ease, excellent gestures, good audience attention, good eye contact. | 15 Good stage presence. Fairly confident, used notes fairly well, good gestures, acceptable audience attention and eye contact. | 10 Adequate stage presence. Read parts, fumbled with notes, several distracting mannerisms, minimal gestures, minimal eye contact, too many um's. | 5 Poor stage presence. Unprepared, awkward, shuffled papers, poor eye contact, lots of um's, turned from audience to read PowerPoint, shuffled feet, fidgeted. Poor gestures. |
| Time Management (15%) | | | |
| 15 Finished on time | 11 Hurriedly finish on time | 5 Did not finish on time | |

Comments: (Yes, you have to do this)

STUDENTS WITH DISABILITIES:

Students with a documented disability (physical, psychological, learning, or other disability which affects academic performance) who would like to receive academic accommodations should contact **Student Accessibility Services (SAS)** as soon as possible to schedule an appointment to initiate services. Accommodations can be arranged through SAS at any time, but are not retroactive. Students who suffer a broken bone, severe injury or undergo surgery during the semester are eligible for temporary services.

Pregnancy, Pregnancy-related, and Parenting Accommodations

Title IX of the Education Amendments of 1972 prohibits sex discrimination, which includes discrimination based on pregnancy, marital status, or parental status. Students seeking accommodations related to pregnancy, pregnancy-related condition, or parenting (reasonably immediate postpartum period) are encouraged to contact Student Accessibility Services for additional information and to request accommodations.

Student Accessibility Services:

Brownsville Campus: Student Accessibility Services is located in Cortez Hall Room 129 and can be contacted by phone at (956) 882-7374 (Voice) or via email at ability@utrgv.edu. **Edinburg Campus**: Student Accessibility Services is located in 108 University Center and can be contacted by phone at (956) 665-7005 (Voice), (956) 665-3840 (Fax), or via email at ability@utrgv.edu.

MANDATORY COURSE EVALUATION PERIOD:

Students are required to complete an ONLINE evaluation of this course, accessed through your UTRGV account (http://my.utrgv.edu); you will be contacted through email with further instructions. Students who complete their evaluations will have priority access to their grades.

ATTENDANCE:

Students are expected to attend all scheduled classes and may be dropped from the course for excessive absences. UTRGV's attendance policy excuses students from attending class if they are participating in officially sponsored university activities, such as athletics; for observance of religious holy days; or for military service. Students should contact the instructor in advance of the excused absence and arrange to make up missed work or examinations.

SCHOLASTIC INTEGRITY:

As members of a community dedicated to Honesty, Integrity and Respect, students are reminded that those who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and expulsion from the University. Scholastic dishonesty includes but is not limited to: cheating, plagiarism (including self-plagiarism), and collusion; submission for credit of any work or materials that are attributable in whole or in part to another person; taking an examination for another person; any act designed to give unfair advantage to a student; or the attempt to commit such acts. Since scholastic dishonesty harms the individual, all students and the integrity of the University, policies on scholastic dishonesty will be strictly enforced (Board of Regents Rules and Regulations and UTRGV Academic Integrity Guidelines). All scholastic dishonesty incidents will be reported to the Dean of Students.

SEXUAL HARASSMENT, DISCRIMINATION, and VIOLENCE:

In accordance with UT System regulations, your instructor is a "Responsible Employee" for reporting purposes under Title IX regulations and so must report any instance, occurring during a student's time in college, of sexual assault, stalking, dating violence, domestic violence, or sexual harassment about which she/he becomes aware during this course through writing, discussion, or personal disclosure. More information can be found at www.utrgv.edu/equity, including confidential resources available on campus. The faculty and staff of UTRGV actively strive to provide a learning, working, and living environment that promotes personal integrity, civility, and mutual respect that is free from sexual misconduct and discrimination.

COURSE DROPS:

According to UTRGV policy, students may drop any class without penalty earning a grade of DR until the official drop date. Following that date, students must be assigned a letter grade and can no longer drop the class. Students considering dropping the class should be aware of the "3-peat rule" and the "6-drop" rule so they can recognize how dropped classes may affect their academic success. The 6-drop rule refers to Texas law that dictates that undergraduate students may not drop more than six courses during their undergraduate career. Courses dropped at other Texas public higher education institutions will count toward the six-course drop limit. The 3-peat rule refers to additional fees charged to students who take the same class for the third time.

STUDENT SERVICES:

Students who demonstrate financial need have a variety of options when it comes to paying for college costs, such as scholarships, grants, loans and work-study. Students should visit the Students Services Center (U Central) for additional information. U Central is located in BMAIN 1.100 (Brownsville) or ESSBL 1.145 (Edinburg) or can be reached by email (ucentral@utrgv.edu) or telephone: (888) 882-4026. In addition to financial aid, U Central can assist students with registration and admissions.

Students seeking academic help in their studies can use university resources in addition to an instructor's office hours. University Resources include the Learning Center, Writing Center, Advising Center and Career Center. The centers provide services such as tutoring, writing help, critical thinking, study skills, degree planning, and student employment. Locations are:

- Learning center: BSTUN 2.10 (Brownsville) or ELCTR 100 (Edinburg)
- Writing center: BLIBR 3.206 (Brownsville) or ESTAC 3.119 (Edinburg)
- Advising center: BMAIN 1.400 (Brownsville) or ESWKH 101 (Edinburg)
- Career center: BCRTZ 129 (Brownsville) or ESSBL 2.101 (Edinburg)