CSCI-471 Professional Communications

Research Article Presentation & Written Analysis

Research Article Topic Selection	Fri, Apr 09
Presentation Outline	Fri, Apr 16
Presentations Due	Mon, Apr 19
Written Analysis Due Date	Fri, May 07

1 The Assignments

For this pair of assignments, you will be given some experience in finding, reading, presenting, and writing an analysis of a research-oriented publication in the area of computer science. It will also give you experience with critiquing other analyses, in a friendly setting. In addition, this assignment will introduce you to many other areas of computing research that you may not be able to investigate thoroughly yourself.

No one would deny that it is important for computer scientists to keep up with developments in their fields. We all are faced with the constant challenge of learning and mastering new programming languages, new tools, new concepts, and new applications. At the same time, we can learn from the history of the discipline of computing. The main purpose of this assignment is to deepen your understanding of a specific area of computer science by critiquing a scholarly paper that helped to define our profession.

1.1 Article Selection

For this assignment you must find, and submit for approval, a scholarly article. There are numerous sources for appropriate papers. Many scholarly papers are published in refereed, technical journals. Additionally, scholars often present their work at conferences, and then papers reflecting that work are later published as part of the conference proceedings. A good place to start looking is the Wallace Memorial Library, which has access to online subscription services. The most useful for our purposes would be the digital archives sponsored by the ACM and IEEE.

Many authors provide access to their own papers through websites, but note there is a distinction in this assignment between personal essays or unpublished documents and papers that have been reviewed prior to publication in appropriate technical sources. ***Papers that are simply posted on the Internet or found in trade publications will not be acceptable for this assignment***. The things that you should look for in an article are:

- Reporting of original research (i.e., not a survey, or reporting of others' results)
- Topic relevant to the computing discipline
- Article from a peer reviewed journal or conference
- Appropriate scholarly content (i.e., bibliographic references)
- Appropriate length (the paper should contain at least five pages of text, not counting pages that contain references or pages that are primarily filled with figures or other non-textual information)

Regarding this last point, you may choose a somewhat longer paper and review and present only some components of the research; this may make it easier for you to understand the topic in sufficient depth to review and present.

Choose a paper that has had some influence on developments in computer science. You are encouraged to choose a paper on a topic of particular interest to you. The range of topics is nearly limitless. You could

explore programming languages, software applications, computer architecture, techniques and paradigms, theoretical contributions, artificial intelligence, algorithm design, or some other computing-related topic. You may choose papers that are not recent if you are primarily interested in historical developments, or you may choose more recent papers that describe a promising new direction for computing.

Since the validity of any paper for this assignment will depend on several factors, and in order to make sure that students select an appropriate paper, there will be a preliminary proposal procedure that must be followed.

1.2 Approval

On or before the *Research Article Selection* date you are required to submit a proposal as a pdf with:

- Your name and email ID
- A bibliography reference for the paper you chose, this must include:
  - Paper's full title
  - The complete names of all authors (as listed on the paper)
  - The identity of the source (journal title, conference proceedings, etc.)
  - The volume and serial number (if applicable)
  - The page number (if applicable)
  - The date of publication for the paper
- A 1-2 paragraph summary of the paper, in your own words (you can't just use the paper's abstract).

You should zip the following files together into a file named **rp_topic.zip** (no folders) and upload them to myCourses assignment: **Individual – Research Paper Topic Selection.**

Item	Description	File Name
1	Your **Proposal**	**rp_proposal.pdf**
2	**The paper you are reviewing**	**rp_source.pdf**

No person will be permitted to present on an article that has not been approved.

As a general rule, only one person may speak on a given paper, or a derived paper from the same author(s), although some exceptions may be made. Topics will be posted on myCourses when approved and will be updated frequently. You are encouraged to view this topic list before submitting your request.

The topic selection is due by the *Research Article Selection* date, those who have not submitted on time will receive a 0 for the individual presentation.

1.3 Presentation

For the first of the two grades on this assignment, you will present the paper in a 10–13-minute video presentation. This video will be reviewed and critiqued by classmates.

Your presentation should primarily be a summary of the main points developed in the paper. Make sure to cover the paper's hypothesis, explain the problem that the paper was addressing, explain the key points of the solution made in the paper and the justification given for them, and then the results that were produced, and the conclusion the paper drew from the results. During the talk you should provide evidence from the paper that directly supports the importance of the paper in either computer science or software engineering.

Your presentation should also spend some time critiquing the article. This should be a brief discussion on how well written the paper is, and the relative merit of the intellectual or scientific contribution. Also talk about if the paper delivers a clear message and convinces you of its accuracy and scientific soundness?

Include in your presentation whatever visual aids you think are desirable (e.g., outlines, diagrams, tables, charts, etc.) to help get the message across that you would like to convey. You may copy/paste charts or figures from the research paper that you are reviewing into your presentation, but if you do so, be sure to include a reference to the paper near the chart or figure, along with the page number in the original document where the chart or figure can be found. You want to make sure that the figure is readable, since often copied images are too small, blurry, or otherwise hard to read. Also, make sure you explain the figure at such a level as to explain what it means, and why it's important.

1.3.1 Presentation Outline Materials

On or before the *Presentation Outline due date,* you will submit to the **Individual - Presentation Outline** myCourses assignment, a copy of your presentation outline in a pdf named: **Presentation Outline.pdf**

This draft should be in outline form with a list of major sections of the talk, sub-sections with major points inside each section, and then a short 1–2-line explanation of what you plan to talk about for each point.

Make sure to include your name, the paper's title, the assignment name, the date, and the course-section number at the top of the first page.

1.3.2 Presentation

You should zip the video file into a file named **rp_video.zip** (no folders) and upload it to myCourses assignment: **Individual – Presentation**

Item	Description	File Name
1	Your **Video**	***lastName_firstName*.[mov,mp4,avi, etc]**

1.3.3 Presentation Peer Review

Each presentation will be critiqued by a selection of the class. The critique will cover both technical content and style. Half of your peer review grade for the course will be based on your critique of everyone else's presentation. You will be assigned a selection of 9 videos to watch. You must submit reviews of 3 of them each week to the **Individual Presentation Review** myCourses assignment, following the **ResearchPresentationEval** template. You should zip up 3 of these files with the name of the person you are reviewing (**LastName_FirstName.pdf**) in a zip file called **PresentationReview.zip** and submit to the appropriate myCourses assignment folder by the due date. You do not need to wait till the due date to submit the peer reviews.

1.3.4 Presentation Evaluation

The table below gives the components that are being graded, and the points assigned to each. Note, you will lose points on the *Overall Assessment* for the way you handled the topic/time slot approval process and the quality handling of the draft outline and electronic presentation materials.

Component	***Weight***
Visuals	10 points
Content	10 points
Organization	10 points
Presentation style	10 points
Overall Assessment	20 points

2.0 Written Analysis

The second major grade for this assignment will be based on a written analysis of the research paper. The review should contain two distinct components, a summary of the work presented in the paper (including the title and authors) and a review of the paper itself.

2.1.1 Paper Summary

Your summary should convey the key points made in each of the papers and the justification given for them. If examples are given, you may want to present parts of them. Provide evidence from the papers that directly supports an advancement in computer science. Be sure to provide citations (giving page numbers from the original paper) for key points, direct quotations, etc. While it's permissible to include quotes from the original papers, you should strive to limit such quotes to short, telling phrases only, and do not include too many such quotes.

2.1.2 Paper Review

Your review should be a brief discussion on how well written the paper was, and the relative merit of the intellectual or scientific contribution. This should be placed after the summary, rather than weaving it throughout the analysis. Does the paper seem complete? Is its hypothesis well-stated and supported by evidence? Does the author use sound logical reasoning? When necessary, does the paper provide adequate background (a literature review)? Do references and other elements suggest to you that the authors knew what they were talking about? What were those elements and how did that come across in the paper? Do you believe the intended audience is well served by this paper? In summary, does the paper deliver a clear message and convince you of its accuracy and scientific soundness? Do not think of the preceding questions as a list merely requiring a "yes" or "no" answer. Rather, provide some sort of explanation or evidence to support your answers.

2.2 Submission

You will not need to turn in draft copies of this assignment, nor will we be doing a group review cycle for this assignment. You should follow the following format for your written analysis paper.

- Your analysis should have a title page, which includes your name, the title and author of the paper being analyzed, the assignment name, the course and section number, and the date.

- The paper should be single-spaced, 12-point font, with a 1-inch margin on all sides of each page. The file should be submitted as a **pdf** document.
- The text of the paper should be ***no longer than four (4) pages***. You should not include the title page, or space taken up with figures when figuring out the page length.

The final version of your Written Analysis is due by *Written Analysis Due Date* specified on the first page. You must submit a pdf named: **Research Paper.pdf** to the **Individual – Written Analysis** myCourses assignment.

Note: No late submissions will be accepted, period. Obviously, early submissions are allowed.

2.3 Grading

The grade for the Written Analysis will be broken down as follows:

Component	***Weight***
Paper summary (showing clear understanding of the paper)	45 points
Article review (critique of the good and bad elements of presentation)	45 points
Meeting assignment specifications	10 points