CSE 591: Introduction to Graduate Study in CSE (Fall 2018)
Homework 3: Critical Conference Reading
Assigned: 9/10/2018, Due: 9/24/2018

In this assignment, you will get to use everything we have discussed finding, reading, and evaluating computer science conference papers. You will identify an interesting area of computer science or engineering, locate and read the proceedings of a recent top conference in this area, select the papers you like best, and defend your choices in writing. This exercise should help you to find out more about an area you might be interested in, to interact with our faculty in that area, and to develop your critical thinking skills. It will also demand that you do some background reading in your area of choice.

1 Pick an Area, a Mentor, and a Conference

Please pick an area and one of the highly ranked conferences in the area. Once you have chosen, **please notify a mentor and me of your choice by email no later than Friday 9/15**. Earlier is better. Remember to use the subject line "CSE 591 Homework 3 Part 1"

You must identify a faculty mentor and have that person (1) confirm his/her willingness to advise you for this assignment and (2) name a top conference for you to study. I must receive an email from the mentor with this information no later than 9/15.

2 Read a Recent Proceedings

You may have to do some Google search work to locate the proceedings of the conference. Some conferences are ACM or IEEE, while others are independent. Start by finding the conference's homepage to help identify the sponsoring organization and publisher for the proceedings If you are stumped, ask your mentor for guidance.

Select the most recent full proceedings for your conference that you can find online (should be 2018; if 2018 is not available online, use 2017). You should at least skim every full paper in the proceedings. You need *not* look at poster abstracts, invited presentations, tutorials, or other minimally-reviewed material. If in doubt, ask your mentor how to identify the proceedings-track papers.

Try to get a sense from your reading of what the "hot topics" were at the conference. Which subjects come up over and over again in papers? As you read over the proceedings, you may need to do additional, outside reading and library work to understand the significance of what you have read. Leave yourself plenty of time to meet with your mentor if necessary for clarification.

Please note that I do not expect you to become an expert about all of the papers in your proceedings. Part of your challenge is to triage the most significant work apart from more technical papers of relatively narrow interest.

3 Select Your Two Favorite Papers

Pick two papers from your proceedings that you consider the best. Your criteria for selection should include at least some combination of the following.

1. Do you understand the paper well enough to explain it to someone else?

2. Does the paper clearly and convincingly articulate the significance of the work performed?

3. Is the paper's relationship to its related work clear? What is its novel contribution?

4.	Does the paper utilize any methods that you find particularly cool or thought-provoking?

5.	Does the paper meet or exceed community standards for validation?

6.	Are the paper's conclusions and claims supported by its detailed exposition and validation?

7.	Would you recommend this paper to a colleague? Why?

You should be prepared to answer all these questions about your papers of choice. Since you are probably not yet an expert in the area that you are studying, you should plan to meet at least once with your mentor to discuss your choices and find out about things like community standards in your area.

4   Defend Your Choices

For *each* of your two papers, prepare a written review of 1-2 pages, single-spaced in the 12-point text with at most 1-inch margins. Indicate clearly at the top of each review which conference, year, and specific paper you are reviewing.

Your review should not merely summarize the content of the paper but should include your own (well-informed) opinions about the work. You should address at least the following points:

1.	Give a summary of the work done (new methods, explorations, etc) in the paper (no more than 1/3 page).

2.	Who are the authors? Have they published related work on the same subject?

3.	Why is the paper's contribution significant to its area? Please explain the contribution in a way that makes sense to someone with a basic CS background but fairly minimal area-specific knowledge.

4.	What aspects of the work are novel? What previous work does the paper build on?

5.	Are the methods used in the paper straightforward for its area, or does it make important methodological contributions?

6.	How well was the work validated, and what were the high points of the validation?

7.	Overall, would you characterize the work as "high-impact"? Why or why not?

Please append a brief bibliography of any references (other papers, books, websites, etc.) that you used in preparing each review. I expect your reviews to be written in good, readable English prose. Mere notes or bullet points are *not* sufficient. Any material quoted or paraphrased from the paper or any other source (e.g., Wikipedia) should be *marked* with a citation of its source.

Please turn in your reviews to me via email as PDF documents. For each review, attach a copy of the reviewed paper to the email. Remember to use the subject line "CSE 591 Homework 3 Part 2" and use one email for both reviews.

5   List of Mentors:

The following faculty members have informed me that they are recruiting this year.

Name	Email	Research Area
Raj Jain	jain@wustl.edu	Networking, Security, IoT, Blockchains, Drones
Ayan Chakrabarti	ayan@wustl.edu	Computer Vision
Chien-Ju Ho	chienju.ho@wustl.edu	Crowdsourcing, Machine learning, human-in-the-loop systems
William Yeoh	wyeoh@wustl.edu	Artificial Intelligence
Miaomiao Zhang	zhang.m@wustl.edu	Image analysis and machine learning
Ning Zhang	zhang.ning@wustl.edu	Computer Security
Michael Brent	brent@wustl.edu	Computational genomics / systems biology
Weixiong Zhang	weixiong.zhang@wustl.edu	Machine learning, Computational biology
Brian Kocoloski	brian.kocoloski@wustl.edu	Systems and Parallel Computing
Roger Chamberlain	roger@wustl.edu	Computer engineering
Kunal Agrawal	kunal@wustl.edu	Parallel Computing/Algorithms
Angelina Lee	angelee@wustl.edu	Parallel computing
Ulugbek Kamilov	kamilov@wustl.edu	Computational Imaging
Roch Guerin	guerin@wustl.edu	Networking and cloud computing
Roman Garnett	garnett@wustl.edu	Machine learning
Xuan Zhang	xuan.zhang@wustl.edu	Hardware for Machine Learning and Artificial Intelligence
Yevgeniy Vorobeychik	yvorobeychik@wustl.edu	Adversarial Machine Learning, Game Theory and Security, Social Choice, Adversarial AI
Gary Stormo	stormo@wustl.edu	Computational Biology
Sanmay Das	sanmay@wustl.edu	AI/ML
Caitlin Kelleher	ckelleher@wustl.edu	HCI
Alvitta Ottley	alvitta@wustl.edu	Visualization