Graduate Admissions 2021

This document describes our plan to process graduate applications to Computing Science for Fall 2021 admissions. The document consists of three parts:

1. An overview of the graduate admission process in Computing Science and the systems (GSMS and GARS-CS) created by FGSR and Computing Science to handle the process
2. Review instructions for faculty members interested in new graduate students, and
3. Review instructions for members of the graduate admission committee

Part I: Graduate Admission Overview

In 2021, Computing Science admits graduate applicants into three separate programs: PhD, MSc (thesis-based), and MSc (course-based). Although PhD and MSc programs also include a statistical machine learning (SML) stream, PhD/MSc SML applicants go through the same review process as regular PhD/MSc applicants. Moreover, thesis-based and course-based MSc applications are ranked and admitted separately. So, the same evaluation criteria and score ranges can be applied to each group.

Each graduate applicant to Computing Science first uses university's GSMS (G*raduate Student Management System*) to submit an application and, subsequently, files another parallel application on GARS-CS (G*raduate Application Review System* for *Computing Science*) to provide supplementary information - such as a statement of purpose, names of potential supervisors, etc. All faculty members can access GSMS and GARS-CS using their CCID via the following URLs:

GSMS: https://graduate-studies-apply.ualberta.ca/urd/sits.urd/run/siw_lgn
GARS-CS: https://gars.ualberta.ca/CS/

GARS-CS periodically downloads GSMS documents and merges them with those in GARS, for those applicants who have created an ID on GARS. The merged documents form a complete dossier and the application is then ready for review. On GARS, you will see five applicant categories: *Review in Progress*, *In Progress*, *New Applications*, *Admitted* and *Rejected*. These categories mirror those in GSMS. Only applicants in the *Review in Progress* category have passed "the compliance check", and are ready to be reviewed.

The decision process for a PhD applicant involves only his/her potential supervisor and the graduate admissions director (GAD). The potential supervisor reviews an applicant's dossier, communicates with the applicant

and, if satisfied, makes a recommendation to GAD. GAD performs an independent review of every recommended applicant to ensure that the general admission requirements (degree, ELP, GPA, CS background, etc.) are met before forwarding the applicant to FGSR for its approval.

For MSc applicants, the admission decision is made by the graduate admission committee (GAC) - consisting of 34 faculty members. To manage the large number of MSc applicants, GAD first screens the applicants, based on applicant's GPA, graduating university, publications, scholarships, etc., to select roughly the top 30% to create a candidate pool of ~300 applicants. As well, any faculty member can identify and suggest applicants to be reviewed by sending email to the GAD. Each applicant in the candidate pool is then reviewed by at least two GAC members, who give a numerical rating between 1 and 10, regarding the applicant's overall qualification (**see scoring details in Part III**), together with a summary description, on GARS. In addition, all faculty members are encouraged to leave comments on the applicants. Upon review of the ratings of all the applicants in the candidate pool and comments by the faculty members, GAD makes the final decision regarding each applicant. Applicants recommended for acceptance are forwarded to FGSR for approval. Admission of an MSc applicant does not require a committed supervisor.

Part II: Review Instructions for Faculty Members Interested in New Students

In GARS, please review applicants only in the *Review in Progress* category. Using the *Filter Options* (near top left corner in GARS), one can search the applicants by area, faculty members whom an applicant would like to work with, test score, area of research, etc.

PhD applicants:

- If you are interested in new PhD students, please identify the ones you like, leave a note by first clicking the applicant's name (left-most column) and then entering comments and a numerical rating in the *Review* section. Please also alert the GAD via email, who can then make admission decisions. *Note that by answering "yes" to the question "Are you willing to supervise this student?", you are committed to the student's supervision and other responsibilities including summer support*.
- Admission decisions will be made based on (a) the interest of the potential supervisors, (b) student's qualification, and (c) supply/demand with respect to both the individual faculty members and the different research areas.

MSc applicants:

- Similar to PhD applicants, anyone can search for MSc applicants and leave comments - by clicking on the applicant's name and entering comments in the *Review* section - and a numerical rating on applicants to help the graduate committee make admission decisions.
- Different from PhD applicants, admission decisions for MSc applicants will take into account the reviews of each applicant by two GAC members, in addition to the expressed interest of faculty members (if any), and supply/demand of the research areas.

This year, we expect to admit ~120 applicants and project 70-80 to enter our program. Admission decisions will be made in batches, to take place around **January 15**, **January 29**, **February 13**, and **February 29**. A few additional admissions may be granted after February 29, to handle special cases and to reach our target numbers.

Part III: Review Instructions for Members of the Graduate Admission Committee

There will be three batches of applicants for the GAC to review MSc applications. The review assignments will be made approximately on **January 16**, **January 30**, and **February 14**, and each committee member will be assigned typically around 10 applications in each batch (half that for reviewers with reduced load). You can find your assignment by checking the "My review assignment" box on GARS. The hope is that you will spend no more than 3 hours to complete your assignment in each batch. The following are some suggested guidelines to follow, although it is difficult to define absolute or quantitative criteria, and subjective judgment is expected:

1. Each applicant shall be given a score between 1 and 10, with 10 being the best and 1 the worst. You should consider 7 to be a borderline case, 8 acceptable, 9 a definite accept, and 10 a star applicant.
2. Please leave a few words in the comment section to substantiate your score, especially to point out unique qualifications/major weaknesses/potential risks that you see in an applicant.
3. Given the large number of applicants, we will enforce CS background requirement strictly, i.e., applicants with weak or minimum CS background will need to demonstrate their exceptional excellence in other ways (e.g., papers in strong journals or conferences, an MSc in a related discipline, scholarships or RA commitment by a faculty member) to be competitive. We will also strictly enforce minimum ELP test scores (IELTS: band 7+, components 6+; TOEFL: total 100+, components 21+; PTE: total 68+, components 60+).

Finally, in GARS, all documents downloaded from GSMS that are related to an applicant are stored in a single PDF file called “GSMS PDF” (3rd column from the left) on the table view of GARS or “GSMS PDF” within the applicant’s page. So, if you want to double-check GSMS documents or if something appears to be inconsistent or missing, you can access GSMS data to check. You will need to use the “Applicant Search” page in GSMS to look up an applicant. In addition, on the applicant’s page, the file “GARS PDF” contains CS-specific information about the applicant collected by GARS.