Course Outline COGS 402 – Research in Cognitive Systems

Instructor(s): Instructors from the Cognitive Systems pool of participating departments direct the course. RA support is provided when necessary.

Objectives: In order to gain first-hand experience with interdisciplinary research students will work in a UBC laboratory in collaboration with Cognitive Systems program. Guidance is provided in the selection, development, and execution of a manageable project in basic or applied research. Possible projects span a wide range of areas, such as designing effective visual displays, developing virtual reality systems, designing speech synthesis systems, understanding unconscious perception, investigating limits on the perception of computer animation, designing human-like avatars, and developing effective teleoperation systems for a variety of conditions.

Requirements: In consultation with Cognitive Systems instructors and affiliated researchers, students choose a laboratory for their project, obtain a collaboration agreement including a synopsis of the research project, prepare and present to all members of the course: a project proposal, occasionally an interim report, and a final project report. A written version of the final report is submitted at the end of term. A review by the laboratory supervisor at the end of term is incorporated into the final assessment of student progress.

Assessment

1st oral presentation within the second week of term\(^1\) \hspace{1cm} P/F
2nd oral presentation within last week of term\(^2\) \hspace{1cm} 15% 
Written report\(^3\) (Due 13 April 2018) \hspace{1cm} 40%
Laboratory work (weeks 1-12\(^4\)) \hspace{1cm} 45%

\(^1\) 1st oral presentation should be about three minutes and should address the what, why, and how of the proposed research. It is mandatory. You will not be permitted to take the course unless this presentation is given within the second week of class.

\(^2\) 2nd oral presentation should be about 5 minutes in duration and should state the what, why, and how of the research, as well as provide a brief summary of the main result(s) to the extent they are available.

\(^3\) Final project should produced in the medium appropriate to the chosen research —e.g., research paper, website, computer simulation, musical performance.

\(^4\) Assessed by person-in-charge from that laboratory or work site. Students are expected to spend a minimum of 9 hours per week in the laboratory.