**COMP 3710 Applied Artificial Intelligence**

**Seminar/Lab 1.**

**Search Space**

1. **Objectives**

* Understand search space
* Formalize a state for a give searching problem

1. **Search space**

* Define a state for each one of the following problems.
  + Missionaries and cannibals problem
  + 3×3 puzzle game
  + Tower of Hanoi problem
* Give initial states and goal states.
* Draw search trees. Not full trees. 3 levels are good.
* Devise an idea or algorithm to find a solution.

1. **Assignment**
   1. You will be given roughly 1 assignment or 2 assignments every week to help you understand all the topics in the lectures.
   2. Submission

* Submit a document for 2) by email. (Note. Hand written documents will not be accepted.)
  + The title of the mail should include your name, id, and COMP 3710.
  + Due:
    - 6:00 pm, September 20, 2017
    - Any late submission will NOT be accepted. Even 1 second according to TRU email system.
* Total marks: 10
  + - **Usually NO partial marks**