**Due Date:** April 2, 2015 at 11:59 pm. As outlined in the syllabus, the course late policy applies to this assignment.

**Submission Instructions:** Assignments are to be submitted through LEARN, in the Dropbox labeled Assignment 6 Submissions in the Assignment 6 folder. Late assignments will be accepted up until April 4 at 11:59pm. Please read the course policy on assignments submitted after the official due date. No assignment will be accepted, for any reason, after 11:59pm on April 4.

**Lead TA:** Daniel Recoskie (dprecosk@uwaterloo.ca)

**Announcements:** This assignment is to be done individually.

In this assignment you will read a research paper and answer questions related to it. The goal of this assignment is to deepen your understanding of recent developments in artificial intelligence and to give you a chance to practice the skills required when reading advanced technical material.

1. Read the instructions in the file "How to Read a Research Paper" which is located in the Assignment 6 directory.
2. Chose **ONE** of the following papers and read it carefully
   - John Asmuth, Michael L. Littman and Robert Zinkov, Potential-based Shaping in Model-based Reinforcement Learning, *Proceedings of the Twenty-Third AAAI Conference on Artificial Intelligence (AAAI 2008)*, pp. 604–609, 2008.
   - Sylvain Gelly, Levente Kocsis, Marc Schoenauer, Michèle Sebag, David Silver, Csaba Szepesvári, and Olivier Teytaud, The Grand Challenge of Computer Go: Monte Carlo Tree Search and Extensions, *Communications of the ACM*, Volume 55, Issue 3, pp. 106–113, 2012.
   - Misha Denil, David Matheson and Nando de Freitas, Narrowing the Gap: Random Forests in Theory and Practice, *Proceedings of the Thirty-first International Conference on Machine Learning (ICML 2014)*, 2014.

   These papers are found in the Assignment 6 directory.
3. For the paper you have chosen, answer the following questions:
   (a) What are the motivations for this work? (5 pts)
   (b) What is the proposed solution? (5 pts)
   (c) What is the evaluation of the proposed solution? (5 pts)
   (d) What are the contributions? (5 pts)

(e) What are future directions for this research? (5 pts)

For each question, you are expected to write at least one paragraph.