

**AI for Traditional Games**  
**Winter, 2013**  
**Course Presentation**

Each graduate student enrolled in the course is required to make a course presentation about a program that plays a game at an expert level. The following guidelines should be used in preparing the presentations:

- The presentations should be 30-35 minutes long with 5-10 minutes for questions.
- Presentations should be made and presented using standard presentation software. The blackboard should not be used.
- Presenters should speak clearly and maintain eye contact with the class. Slides should be well organized, and the talk should be practiced to ensure that it is of appropriate length.

The technical content of the presentation should cover:

- Presentations should cover the background of the game to be played and a short history of game-playing programs for the game. (Not more than 5 minutes.)
- Presentations should cover the key technologies used to build the program. This key technologies should be covered with reasonably deep technical detail. For example, the key technology behind the Chinook Checkers playing program is endgame databases. A presentation on Checkers should cover how they are built, how large they are, and the technical complications of building them, as well as how they are used in the game.
- If there is overlap in techniques discussed in class, the technique used in the particular game should be related to the techniques in class, and any specific details of the implementation should be presented.
- Details of matches with human experts should be provided, justifying or debunking claims of expert-level play. (Not more than 5 minutes.)
- The resources on the next page can be used to get started, but other resources can (and should) be used to inform the presentation.

Overall, the presentations should be both fun and informative.

## Sample Readings

### **Fuego / Go:**

Fuego – An Open-source Framework for Board Games and Go Engine Based on Monte-Carlo Tree Search

[https://www.cs.ualberta.ca/system/files/tech\\_report/2009/TR09-08\\_0.pdf](https://www.cs.ualberta.ca/system/files/tech_report/2009/TR09-08_0.pdf)

Achieving Master Level Play in 9x9 Computer Go

<http://www.aaai.org/Papers/AAAI/2008/AAAI08-257.pdf>

### **Maven / Scrabble:**

World-Championship-Caliber Scrabble

[http://www.sciencedirect.com/science?](http://www.sciencedirect.com/science?_ob=MImg&_imagekey=B6TYF-44BMP49-1-2&_cdi=5617&_user=1497530&_pii=S0004370201001667&_origin=search&_coverDate=01%2F31%2F2002&_sk=998659998&view=c&wchp=dGLzVtz-zSkzV&md5=848dd8191c0c7db5035a646b6d005b7c&ie=/sdarticle.pdf)

[\\_ob=MImg&\\_imagekey=B6TYF-44BMP49-1-2&\\_cdi=5617&\\_user=1497530&\\_pii=S0004370201001667&\\_origin=search&\\_coverDate=01%2F31%2F2002&\\_sk=998659998&view=c&wchp=dGLzVtz-zSkzV&md5=848dd8191c0c7db5035a646b6d005b7c&ie=/sdarticle.pdf](http://www.sciencedirect.com/science?_ob=MImg&_imagekey=B6TYF-44BMP49-1-2&_cdi=5617&_user=1497530&_pii=S0004370201001667&_origin=search&_coverDate=01%2F31%2F2002&_sk=998659998&view=c&wchp=dGLzVtz-zSkzV&md5=848dd8191c0c7db5035a646b6d005b7c&ie=/sdarticle.pdf)

Opponent Modeling in Scrabble

[http://reason.cs.uiuc.edu/mdrichar/my\\_papers/IJCAI07-239.pdf](http://reason.cs.uiuc.edu/mdrichar/my_papers/IJCAI07-239.pdf)