# COMP 343 Reading Assignments

#### Fall 2016

#### Abstract

One goal of this course is to develop your ability navigate the primary sources of computing: journal and conference papers. Towards this end you'll be reading and reporting on at least a paper per chapter covered. This document describes what you need to submit for every paper in order to get credit for the reading as well as how reading assignments will be graded.

## 1 How to Read

We'll be using Keshav's three-pass approach in this class[3]. We'll discuss this approach on day one. For the most part, you'll only be doing two-pass readings. A full third-pass will on be necessary for one or two papers relative to your literature review.

## 2 What to Turn In

For each reading assignment you will turn in a one two two page report containing:

### • The five Cs:

After the first pass reading you should be able to produce the five Cs. Your focus should first and foremost be on Context and Contributions. Once you understand what's being said in the paper and the context from which it arose, then comment on clarity and correctness. Finally, categorize the paper as best as possible.

#### • A Summary:

After the second pass you should be able to provide a brief, one to two paragraph summary of the paper's content in your own words.

# 3 Grading

Reading reports are graded on a three point scale. Scores will be averaged together and the final reading assignment grade is determined based on the scale below.

| Assignment Avg. (Min) | Letter Grade |
|-----------------------|--------------|
| 2.7                   | A            |
| 2.5                   | A-           |
| 2.4                   | B+           |
| 2.1                   | В            |
| 2                     | B-           |
| 1.7                   | C+           |
| 1.5                   | С            |
| 1                     | C-           |
| 0.7                   | D            |
| i 0.7                 | F            |

# 4 Papers

You'll be reading the following papers in the following order. For due dates see the syllabus.

- 1. Turing, A. M. Computing machinery and intelligence. Mind 59, 236 (1950), 433-460
- 2. Horvitz, E. J., Breese, J. S., and Henrion, M. Decision theory in expert systems and artificial intelligence. *Int. J. Approx. Reasoning* 2, 3 (July 1988), 247–302
- 3. Korf, R. E., and Schultze, P. Large-scale parallel breadth-first search. In *Proceedings of the 20th National Conference on Artificial Intelligence Volume 3* (2005), AAAI Press, pp. 1380–1385
- 4. Minton, S., Johnston, M. D., Philips, A. B., and Laird, P. Minimizing conflicts: A heuristic repair method for constraint satisfaction and scheduling problems. *Artif. Intell.* 58, 1-3 (Dec. 1992), 161–205
- 5. Frank, I., Basin, D., and Matsubara, H. Finding optimal strategies for imperfect information games. In *Proceedings of the Fifteenth National/Tenth Conference on Artificial Intelligence/Innovative Applications of Artificial Intelligence* (Menlo Park, CA, USA, 1998), AAAI '98/IAAI '98, American Association for Artificial Intelligence, pp. 500–507
- 6. Pearl, J. Reverend bayes on inference engines: A distributed hierarchical approach. In *Proceedings* of the Second AAAI Conference on Artificial Intelligence (1982), AAAI'82, AAAI Press, pp. 133–136
- 7. SILVER, D., HUANG, A., MADDISON, C. J., GUEZ, A., SIFRE, L., VAN DEN DRIESSCHE, G., SCHRITTWIESER, J., ANTONOGLOU, I., PANNEERSHELVAM, V., LANCTOT, M., DIELEMAN, S., GREWE, D., NHAM, J., KALCHBRENNER, N., SUTSKEVER, I., LILLICRAP, T., LEACH, M., KAVUKCUOGLU, K., GRAEPEL, T., AND HASSABIS, D. Mastering the game of go with deep neural networks and tree search. *Nature* 529 (2016), 484–503

# References

- [1] Frank, I., Basin, D., and Matsubara, H. Finding optimal strategies for imperfect information games. In *Proceedings of the Fifteenth National/Tenth Conference on Artificial Intelligence/Innovative Applications of Artificial Intelligence* (Menlo Park, CA, USA, 1998), AAAI '98/IAAI '98, American Association for Artificial Intelligence, pp. 500–507.
- [2] HORVITZ, E. J., BREESE, J. S., AND HENRION, M. Decision theory in expert systems and artificial intelligence. *Int. J. Approx. Reasoning* 2, 3 (July 1988), 247–302.
- [3] KESHAV, S. How to read a paper. SIGCOMM Comput. Commun. Rev. 37, 3 (July 2007), 83–84.
- [4] KORF, R. E., AND SCHULTZE, P. Large-scale parallel breadth-first search. In *Proceedings of the 20th National Conference on Artificial Intelligence Volume 3* (2005), AAAI'05, AAAI Press, pp. 1380–1385.
- [5] MINTON, S., JOHNSTON, M. D., PHILIPS, A. B., AND LAIRD, P. Minimizing conflicts: A heuristic repair method for constraint satisfaction and scheduling problems. *Artif. Intell.* 58, 1-3 (Dec. 1992), 161–205.
- [6] Pearl, J. Reverend bayes on inference engines: A distributed hierarchical approach. In *Proceedings of the Second AAAI Conference on Artificial Intelligence* (1982), AAAI'82, AAAI Press, pp. 133–136.
- [7] SILVER, D., HUANG, A., MADDISON, C. J., GUEZ, A., SIFRE, L., VAN DEN DRIESSCHE, G., SCHRITTWIESER, J., ANTONOGLOU, I., PANNEERSHELVAM, V., LANCTOT, M., DIELEMAN, S., GREWE, D., NHAM, J., KALCHBRENNER, N., SUTSKEVER, I., LILLICRAP, T., LEACH, M., KAVUKCUOGLU, K., GRAEPEL, T., AND HASSABIS, D. Mastering the game of go with deep neural networks and tree search. *Nature* 529 (2016), 484–503.
- [8] Turing, A. M. Computing machinery and intelligence. Mind 59, 236 (1950), 433–460.