Where to send People for more Information

SGAI/AISB Careers' Event
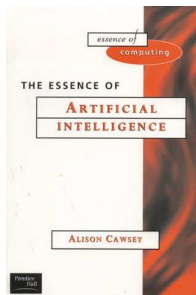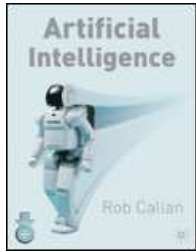
May 4, 2004

Books

The first two books in the following list cover the standard topics studied by scientists involved in Artificial Intelligence. They should give anyone thinking of studying the subject a good idea of the sort of material that will be covered by any such course. Alison Cawsey's is the shorter of the two volumes and probably works best as a brief introduction while Rob Callan's covers things in more detail and would work well as a follow up for someone interested in finding out more. Obviously as general text books neither of them covers any topic in the sort of level of detail that a specialist text book would nor do they explore some of the less mainstream areas. Neither of these books particularly needs to be read in order so someone could just cherry pick those topics that interested them.

The third book is a bit of an oddity and is very different from material that would be covered in any detail in the core of most AI degrees. However for students with an interest in the Philosophy of Mathematics, Computing and Artificial Intelligence then it is a thought-provoking and quirky read. It is quite heavy going in places though.
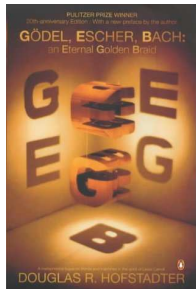
- The Essence of Artificial Intelligence by Alison Cawsey. Prentice Hall, 1998.

- Artificial Intelligence by Rob Callan, Palgrave Macmillan, 2003

- Gödel, Escher, Bach: An Eternal Golden Braid by Douglas R. Hofstadter, Penguin 1979.

Books to Avoid

The following books are quite high profile but could well be counter-productive for someone interested in studying or working in Artificial Intelligence. While they do contain good material they also speculate considerably on the sort of products AI might produce, the timescales these things might be produced in and the effects they would have on society at large. These are interesting topics but could give rise to unrealistic expectations about the current state of the field. People who read or have read them should be encouraged to look at some of the other books we recommend before deciding to pursue a career or study in Artificial Intelligence and should apply considerable critical thought to some of the speculations put forward.

- Scientific American Compendium of Artificial Intelligence.

- In the Mind of the Machine, QI: The Quest for Intelligence and I, Cyborg by Kevin Warwick.

Web Pages

There are many, many web pages devoted to Artificial Intelligence. Here are a few that might serve as good starting points for exploration.

- What is AI. http://www-formal.stanford.edu/jmc/whatisai/whatisai.html

This site is maintained by John McCarthy one of the founders of the field and he keeps it up-to-date. It is a good place to start exploring the nature of Artificial Intelligence.

- AAAI AI Topics site. http://www.aaai.org/AITopics/index.html

  The American Association for Artificial Intelligence maintains a large website full of resource. This particular page is aimed at young people and provides material they might find useful in school projects as well as suggestions for reference material and the like.

- Russell and Norvig, http://www.cs.berkeley.edu/ russell/ai.html

  This page is essentially a massive set of links to other Artificial Intelligence resources on the Internet. It divides its links by subject and type and in each section as sets of links it highly recommends. This makes it very valuable as a jumping off point for anyone wanting to seek out more information for themselves.

  This page is maintained by Russell and Norvig who are the authors of one of the primary Artificial Intelligence text books used by many university courses (Artificial Intelligence: A Modern Approach published by Prentice Hall - this is quite a big and potentially intimidating book so we haven't recommended it but a keen pupil might well find it an interesting alternative to Rob Callan's).

Thanks

Thanks to Eduardo Alonso, John Barnden, David Breé and Simon Colton for suggestions about books and web sites.