

AIMA Home

Code

Contents

Courses

Errata

Instructors

Search AIMA

Artificial Intelligence: A Modern Approach

(Third edition) by **Stuart Russell** and **Peter Norvig**

The <u>leading textbook</u> in Artificial Intelligence.

Used in over **1300** universities in over **110** countries.

The <u>22nd most cited</u> computer science publication on Citeseer (and 4th most cited publication of this century).

What's New

• Free Online AI course, Berkeley's CS 188, offered through edX.

Comments and Discussion

- Comments from readers
- Errata list (errors in the book)
- <u>AIMA-talk</u> discussion list, open to all

AI Resources on the Web

- AI Resources in many categories
- AI courses that are using AIMA (1300 schools)

Online Code Repository

- Pseudo-code algorithms from the book in pdf.
- Online code at <u>aimacode</u> project on Github.
- Online demos (Java applets and Javascript)
- The OpenNERO 3D multiagent simulator

For the Instructor

- AI Instructor's Resource Page
- Lecture slides coming soon.

Getting the Book

- From the publisher, other online sellers or a local library
- E-book: <u>CourseSmart</u>, <u>Kindle</u>, <u>Nook</u>, <u>Cafe Scribe</u>, <u>Kno</u>
- Previous editions: 1st, 2nd, translations

Table of Contents

[Full Contents]
Preface [html]

Part I Artificial Intelligence

- 1 Introduction ... 1
- 2 Intelligent Agents ... 34

Part II Problem Solving

- 3 Solving Problems by Searching ... 64
- 4 Beyond Classical Search ... 120
- 5 Adversarial Search ... 161
- 6 Constraint Satisfaction Problems ...

202

Part III Knowledge and Reasoning

- 7 Logical Agents ... 234
- 8 First-Order Logic ... 285
- 9 Inference in First-Order Logic ... 322
- 10 Classical Planning ...366
- 11 Planning and Acting in the Real

World ... 401

12 Knowledge Representation ... 437

Part IV Uncertain Knowledge and Reasoning

- 13 Quantifying Uncertainty ... 480
- 14 Probabilistic Reasoning ... 510
- 15 Probabilistic Reasoning over Time ...

566

- 16 Making Simple Decisions ... 610
- 17 Making Complex Decisions ...645

Part V Learning

- 18 Learning from Examples ...693
- 19 Knowledge in Learning ... 768
- 20 Learning Probabilistic Models ... 802
- 21 Reinforcement Learning ... 830

Part VII Communicating, Perceiving, and Acting

- 22 Natural Language Processing ... 860
- 23 Natural Language for

Communication ... 888

- 24 Perception ... 928
- 25 Robotics ... 971

Part VIII Conclusions

- 26 Philosophical Foundations ... 1020
- 27 AI: The Present and Future ... 1044

http://aima.cs.berkeley.edu/

A Mathematical Background [pdf] ...

1053
B Notes on Languages and Algorithms
[pdf] ... 1060
Bibliography [pdf and histograms] ...

1063
Index [html or pdf] ... 1109

AI: A Modern Approach

Modified: Jan 08, 2018

http://aima.cs.berkeley.edu/