

Computational Logic: (Constraint) Logic Programming *Theory, practice, and implementation*

Textbooks and References

*Department of Artificial Intelligence
School of Computer Science
Technical University of Madrid
28660-Boadilla del Monte, Madrid, SPAIN*

The following people have contributed to this course material:

Manuel Hermenegildo (editor), Francisco Bueno, Manuel Carro, Pedro López, Daniel Cabeza, and José Francisco Morales Technical University of Madrid, Spain; *María José García de la Banda*, Monash University, Australia; *David H. D. Warren*, University of Bristol, U.K.; *Ulrich Neumerkel*, Technical University of Vienna, Austria; *Michael Codish*, Ben Gurion University, Israel

Textbooks and basic references - I

- Basic textbooks (Prolog/CLP):
 - ◇ “The Art of Prolog” (Second edition), Sterling & Shapiro, MIT Press, 1994.
 - * Available at http://cliplab.org/logalg/doc/The_Art_of_Prolog.pdf, and <https://mitpress.mit.edu/books/art-prolog-second-edition> (Open Access from MIT Press)
 - ◇ “Programming with Constraints: An Introduction”, Marriott & Stuckey, MIT Press, 1998.
- A collection of survey articles about different Prolog systems:
 - ◇ “Special issue on Prolog systems,” Bart Demoen & Maria Garcia de la Banda, Theory and Practice of Logic Programming, volume 12(1-2), 2012.
- Theory and fundamentals:
 - ◇ “Foundations of Logic Programming” (2nd edition), J.W. Lloyd, Springer-Verlag, 1991.
 - ◇ “Logic for Computer Science: Foundations of Automatic Theorem Proving”, J.H. Gallier. John Wiley. 1987, 2015 (2nd edition).

Textbooks and basic references - II

- Other textbooks:

- ◇ “Programming in Prolog”, Clocksin & Mellish, Springer–Verlag, 1981, 2003 (5th edition).
- ◇ “Prolog Programming for Artificial Intelligence”, I. Bratko, Addison–Wesley Ltd., 2011 (4th edition).
- ◇ “From Logic Programming to Prolog”, K. Apt, Prentice–Hall, 1997.

- Other references:

- ◇ “Warren’s Abstract Machine: A Tutorial Reconstruction,” H. Ait-Kaci, MIT Press, 1991.
- ◇ “Prolog: The Next 50 Years,” D.S.Warren, V. Dahl, T. Eiter, M. Hermenegildo, R. Kowalski, F. Rossi (Eds.). Springer, LNCS, 13900, July 2023.
- ◇ “Special Issue on Ten Years of Logic Programming,” M. Bruynooghe, S.K. Debray, M.V. Hermenegildo, and M. Maher (Eds.), The Journal of Logic Programming, Volumes 19/20, North Holland, 1994.
- ◇ “Constraint Satisfaction in L.P.”, P. Van Hentenryck, 1989, MIT Press.