

Education for Logical Thinking in the Age of AI

Bob Kowalski

Imperial College London, United Kingdom

Abstract:

The rapid advance of AI transforming the world. No one knows what the new AI world will be like and how we humans will learn to live with it. I will argue that, no matter where we may be headed, we need to improve our ability to think logically and to use our logical thinking to monitor and control AI.

I will present the work of the Prolog Education Group (PEG), which is working towards this goal, by building upon more than 50 years of expertise of applying logic programming (LP) to knowledge representation and problem solving in AI. I will argue that LP is particularly well suited for teaching logical thinking, because it is much simpler than most other logics, but in many respects it is also more powerful. By developing educational materials in LP, we aim to teach the critical, logical thinking skills needed in the new world of AI.