

Online Franco-African Seminar in Digital Sciences - LIRIMA
Wednesday November 24 2021, 4:00 pm (Paris Time)

Ratheil HOUNJJI, Abomey-Calavi University, Benin



Constraint Programming: principles and applications.

Abstract

Constraint Programming (CP) is a paradigm derived from artificial intelligence, operational research, and algorithmic that can be used to solve combinatorial optimization problems. CP solves problems by interleaving search (assigning a value to an unassigned variable) and propagation (removing inconsistent values). CP is effective in solving problems in many domains such as scheduling, planning, vehicle routing, configuration, networks, etc. This communication presents some well-known applications in which CP can be very efficient. This communication also aims to show the general principle used by CP to solve problems.

Short biography

Ratheil Houndji received a Ph.D. in Computer Science (from Université catholique de Louvain - UCL, Belgium & Université d'Abomey-Calavi - UAC, Benin) in 2017 after obtaining a Master of Science degree in Computer Science (from Ecole Polytechnique de Louvain, UCL, Belgium) in 2013 and an Engineer degree in Computer Science and Telecommunications (from Ecole Polytechnique d'Abomey-Calavi, UAC) in 2011. He co-founded the company Machine Intelligence For You (MIFY) in 2017 and spent one year as Chief Executive Officer of this company.

Currently, he is:

- Senior Lecturer at UAC, mainly in Artificial Intelligence and Combinatorial Optimization;
- Scientific Collaborator at ICTEAM (in Artificial Intelligence & Algorithms research group), UCLouvain, Belgium;
- Competition chair of Mify Artificial Intelligence Contest, an international Artificial Intelligence;
- Chair of the Association for the Advancement of Artificial Intelligence (AAAI) Benin chapter.