

Preface

In the new programs for primary school classes, computer science has become a full-fledged discipline. This discipline is no longer a simple productivity tool; it offers learners new ways to interact with data, to innovate in assignments and to face challenges.

It's within this context that the textbook « computer Science, Robotics and Artificial Intelligence » has been developed. Its content is all very ambitious.

The fields explored are :

- **Office software**, with its fundamental applications.
- **Programming**, taught through Scratch, is not just a technical demonstration, but a playful approach to algorithmics.
- **Robotics** is demonstrated by the pedagogical robot Thymio because of its simplicity, security, versatility and performances. It highlights the capacity of learners to collaborate, develop critical thinking skills and solve problems in a creative way.
- **Artificial Intelligence** : a new innovation, requires a generation that is well-prepared to harness its potential. This textbook anticipates these major changes.

The learning path is structured through the following sequences :

- **Guided workshop** : a learning sequence where teachers guide learners to successfully complete an activity.
- **Independent practice** : an extension of the guided workshop aimed at providing learners with sufficient opportunities for practice to consolidate their learning.
- **Personal challenge** : a way to challenge oneself, grow and achieve personal objectives through assignments related to the activities covered.
- **Evaluation** : a process aimed at checking students' knowledge.

The mobile application «Computer Science, Robotics and Artificial Intelligence», available on Play Store and MSM Store, complements the textbook. It offers interactive activities that help reinforce learners' knowledge. A computer version is also available in the teacher's guide developed for the benefits of educators. Teachers will also find a set of resources that will enable them to carry out their teaching more effectively.

With this textbook, we hope to share our passion for innovation by progressively introducing learners to the basics of artificial intelligence, thus preparing them to face the challenges of the future.

The authors