

SCRATCHJR: CODING FOR YOUNG CHILDREN

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Abstract

ScratchJr is an introductory programming language for young children (ages 5-7), developed by MIT Media Lab, Tufts University, and Playful Invention Company. The initial version of ScratchJr (for the iPad) will be released in summer 2014. In this workshop, we will provide a hands-on introduction to ScratchJr, and we will discuss the ideas and motivations underlying the design of ScratchJr.

Keywords Scratch, ScratchJr, coding, programming



ScratchJr is an introductory programming language that enables young children (ages 5-7) to create their own interactive stories and games. Children snap together graphical programming blocks to make characters move, jump, dance, and sing. Children can modify characters in the paint editor, add their own voices and sounds, even insert photos of themselves – then use the programming blocks to make their characters come to life.

As they create projects with ScratchJr, young children develop design and problem-solving skills that are foundational for later academic success. At the same time, they use math and language in a meaningful and motivating context, supporting the development of early-childhood numeracy and literacy.

ScratchJr was inspired by the Scratch programming language, used by millions of young people (ages 8 and up) around the world. In creating ScratchJr, we redesigned the interface and programming language to make them developmentally appropriate for younger children, carefully designing features to match young children's cognitive, personal, social, and emotional development.

The initial version of ScratchJr will be launched in summer 2014, as a free app for the iPad. We plan to release a version for Android later in 2014, and a web-based version after that.

In this workshop, we will provide a hands-on introduction to ScratchJr, and we will discuss the ideas and motivations underlying the design of ScratchJr. We will also discuss plans for a table version of Scratch.

Participants are encouraged to bring iPads, if possible.