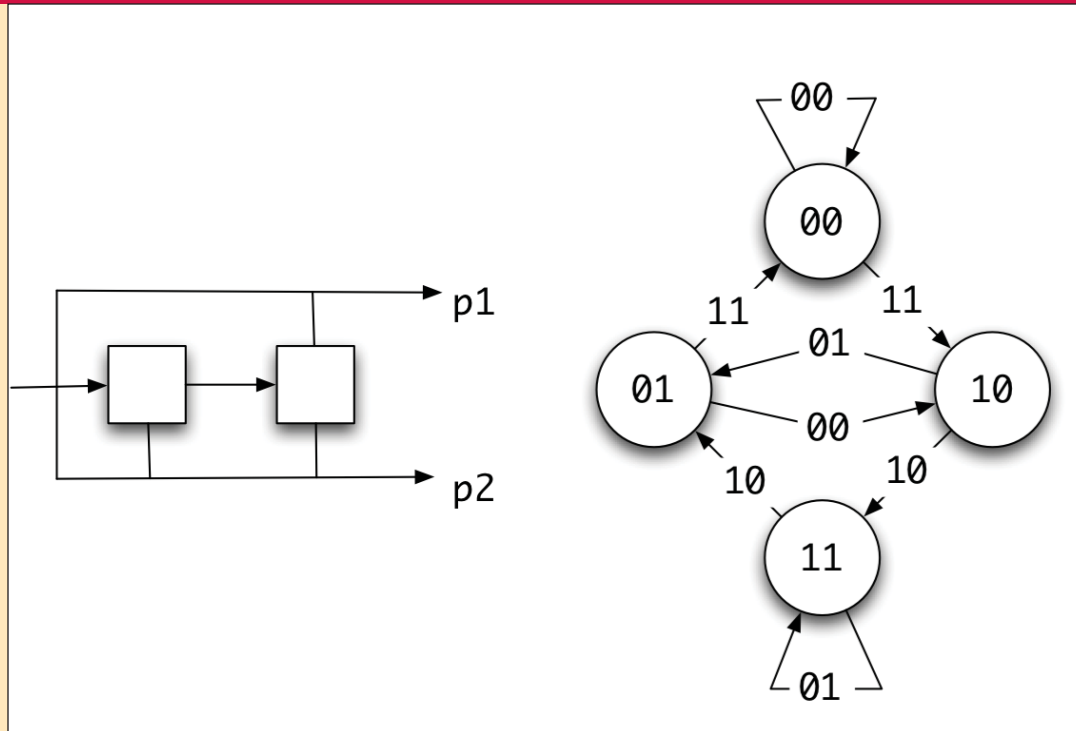


computer science

CONVOLUTIONAL CODING LAB

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Faculty

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The search for effective error control strategies leads to many different branches of coding theory. By exploring the memory/computation trade-off in the encoding and decoding processes, the Convolutional Coding Group examines new ways of looking at error correction, encryption, and signal processing. By defining a group of convolutional encoders, known as Locally Invertible Encoders, the CCG group has created hardware and software for efficient encoding and decoding of strong, customizable communications systems.

Current projects are looking at the use of these encoders for creating secure digital communication, as well as providing error correction in multiple dimensions.