

The Method of Types and Its Application to Information Hiding

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ABSTRACT

The method of types is frequently used to analyze communication channels with arbitrary memory. It is therefore a useful tool to study communication problems with an adversary (who need not be limited by memory constraints). This paper presents an introduction to the method of types and reviews recent applications of the method to information hiding. These problems include capacity and error-exponent analyses for watermarking, fingerprinting and steganography. The role of randomized codes and universal decoders is highlighted.