

Reed-Solomon codes are a typical example of MDS codes, that are frequently used in practise. In this thesis, we go over three different algorithms of decoding these codes, including the initial view from the original article, as well as the modern approach of currently used algorithm and of another possible efficient algorithm. We compile various sources and unite them under the same notation. We describe in detail the theory behind each algorithm, show its correctness, discuss every algorithm's time complexity and demonstrate its steps on simple examples.