Abstract: In this thesis, I am presenting several methods of Czech-to-Russian machine translation, including both historical approaches and more modern ones, and including both phrase-based and rule-based systems. I am first briefly describing the linguistic background of Czech and Russian, and their common history and differences. Then, I am describing automating, building and improving some oft he machine translation systems, together with their comparison, using both an automated metric and a limited human annotation. Meanwhile, I am also describing the creation of a several corpora of Czech-Russian parallel data and Russian monolingual data.