

Abstract– This research aims to produce a statistical machine translation that can be implemented to perform Javanese-Indonesian translation and to know the influence of the main data sources of statistical machine translation namely parallel corpus and monolingual corpus on the quality of Javanese-Indonesian statistical machine translation. The testing was carried out by gradually adding the quantity of parallel corpus and monolingual corpus to seven configurations of Javanese-Indonesian statistical machine translation. All machine translation configuration experiments were tested with test data totaling 500 lines of Javanese sentences. Results from machine translation are evaluated automatically using Bilingual Evaluation Understudy (BLEU). Test results in seven configurations showed an increase in the evaluation value of the translation machine after the quantity of parallel corpus and monolingual corpus was added. The quantity of parallel corpus in configurations 1 and 2 increased by 3,6%, configurations 2 and 3 increased by 8,23%, configurations 3 and 7 increased by 14,92%. Additional monolingual corpus quantity in configurations 4 and 5 increased BLEU score by 0,18%, configurations 5 and 6 increased by 0,06%, configurations 6 and 7 increased by 0,24%. The test results showed that the quantity of parallel corpus and monolingual corpus could increase the evaluation value of statistical machine translation Javanese-Indonesian, but the quantity of parallel corpus had a greater influence than the quantity of monolingual corpus.