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### **Chapter 7**

#### **Results**

After having created a gold standard (see Chapter 6) for evaluating the quality of the alignments, I compared the alignments computed by SimAlign with the alignments computed by a baseline system. I shall now proceed present the results of the experiment.

#### 7.1 Baseline System

As a baseline system, I chose fast\_align (Dyer, Chahuneau, and Smith 2013). fast\_align is a re-parameterization of the IBM Model 2. It has become a popular seccessor to Giza++, serves as a baseline system in other works, and is even recommended by WHO? as an alternative for Giza++ for computing the word alignments for Moses SMT. It outperforms Giza++ in many scenarios.

fast\_align is extremely fast—computing the word alignments for the around 80,000 sentence pairs took around 50 seconds. It is well documented and is extremely easy to compile and to operate. All of this makes fast\_align the most attractive system to use as a baseline system.

|          | Dataset size                           | Percision     | Recall        | F1            | AER           |
|----------|--|---------------|---------------|---------------|---------------|
| Baseline | ~80k<br>50k<br>25k<br>10k<br>5k<br>600 | 0.625<br>blah | 0.786<br>blah | 0.696<br>blah | 0.304<br>blah |

# Glossary

**Graubünden** The Canton of Grisons. 7

# Acronyms

**AER** Average Error Rate. 35

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