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A performance monitoring tool for translators

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Abstract: ***We exhibit a device for the assessment of interpretation quality. In the first place, the run of the mill prerequisites of such a device in the system of machine interpretation (MI) exploration are examined. We characterize assessment criteria which are more sufficient than immaculate alter separation and we portray how the estimation along these quality criteria is performed semi-naturally in a quick, advantageous or more all steady way utilizing our apparatus and the comparing graphical client interface. The primary destination of the papers and theme is to make a specimen machine interpreter framework and examine the given interpretation application and screen the execution of the given interpreter on premise of exactness and time taken for the interpreter to change over a set of record or given line of content from source dialect to target dialect.***

Keywords: Machine Translation, Machine Interpretation, Word Error Rate, Software Development Lifecycle.

I. INTRODUCTION

Nowadays, online Machine Translation (MT) is used widely with translation software, such as Google and Babylon, being easily available and downloadable. These online translator works on a set of objectives and rules such as lexical analysis, grammar & accuracy. These free machine translators are always tested for improvement process. Top translators are Google Translate, Bing & Babylon as they top the chart for the FMT tests. There are automatic methods to evaluate the machine translation outputs, according to a metric measurement. BLUE, NIST, WER (Word Error Rate), and METEOR, are typical examples for metrics, designed to evaluate the output of machine translation. Metrics to predict the quality of texts translated automatically by Machine Translation (MT) systems have become a necessity in many scenarios. The most commonly used MT evaluation metric in recent years has been IBM's Bleu metric (Papineni et al., 2002). Most notably, Bleu does not produce very reliable sentence-level scores. Meteor, as well as several other proposed metrics such as GTM (Melamed et al., 2003), TER (Snover et al., 2006) and CDER (Leusch et al., 2006) aim to address some of these weaknesses. For evaluation 10,000 sentences from varied domains have been used. The estimation of the amount of time needed to complete the translation of a document is done randomly. The performance of the translators is also tracked manually. Hence we have to automate this process to give the requestors a better & timely service. Automating the entire process naturally proves more effective than performing these tasks manually. Automation not only saves time but also a lot of paper work can be easily avoided. This leads to increased quality of work. There are many reasons why you might wish to automate this process, ranging from the obvious one of efficiency, right down the scale to more frivolous reasons. The idea behind the automation is not to just automate the paper system that you use now, but take the opportunity to really make use of the computer to add value to your work.

II. SYSTEM DESCRIPTION

Our Performance Monitoring Tool is a system to automate the process of evaluating the performance of the translators who translate the documents in English to other language and vice-versa by estimating the time needed for the job and the actual time taken by the translator for the same and checking the percentage of work completed. Performance can be determined by time taken, no of feedbacks i.e. quality of translation.

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The goal of this paper is Automatic Evaluation of Machine Translation which when compared to Human Translation is not on par in terms of performance and accuracy. A simple performance monitoring system for the machine translator will ease the task of translation without human help and record the accuracy and time required for the translator to perform a translation from source language to target language.

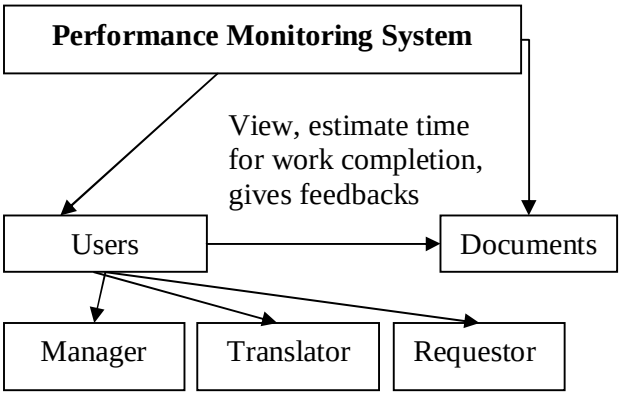

Fig. 1 Flow chart of Performance Monitoring Tool

The various goals & objectives of the system are: Efficient Employee performance management, Work paper management, Problem recording and clearance, Report generation, Maintaining the work-hours schedule of the translators, Feedback tracking and follow up, Maintain a mail master & create a mail format, Creating easy to use search screens based on start & end dates of the document, Granting of access rights by the manager

III.EXPERIMENTS

We have made this instrument to help examination chip away at interpreters. We research how mixture machine interpretation can be changed towards ideal determination from the given hopeful interpretations. Some piece of the test setup is an imparted errand in which members need to execute this ideal decision step. We utilize our instrument to evaluate the interpretation nature of the subsequent frameworks. It has likewise been utilized as a part of exploration work identified with the making of standalone cross breed machine interpretation approaches. To make this paper self-contained, we provide experiments with models trained offline which are already available through the Web interface. Our experiments include one language pair, i.e., German-English. We have also tested the response time of these pre-built models for each module in online system, as shown in figure 2. These figures refer to running performance monitoring tool at a local host on a dual core of machine Intel(R) i3(R) CPU 2120 @ 3.3GHz with 4GB of RAM. The response time for remote requests will depend upon the network speed. It is important to note the difference between response time for each of the dataset: The use of larger resources to extract features yields overall slower response time.

IV.RESULT

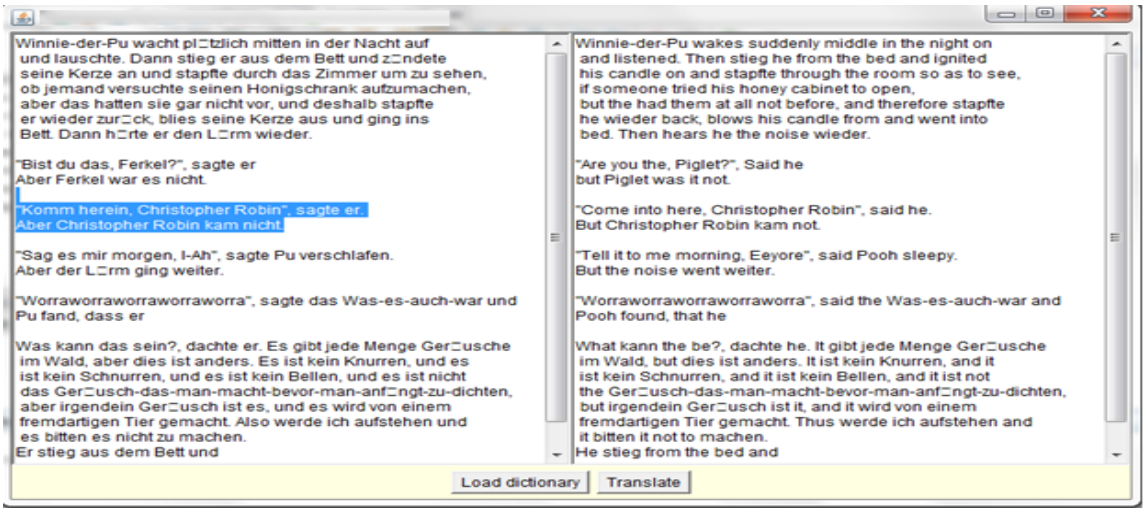

Fig. 2 Translation from German to English

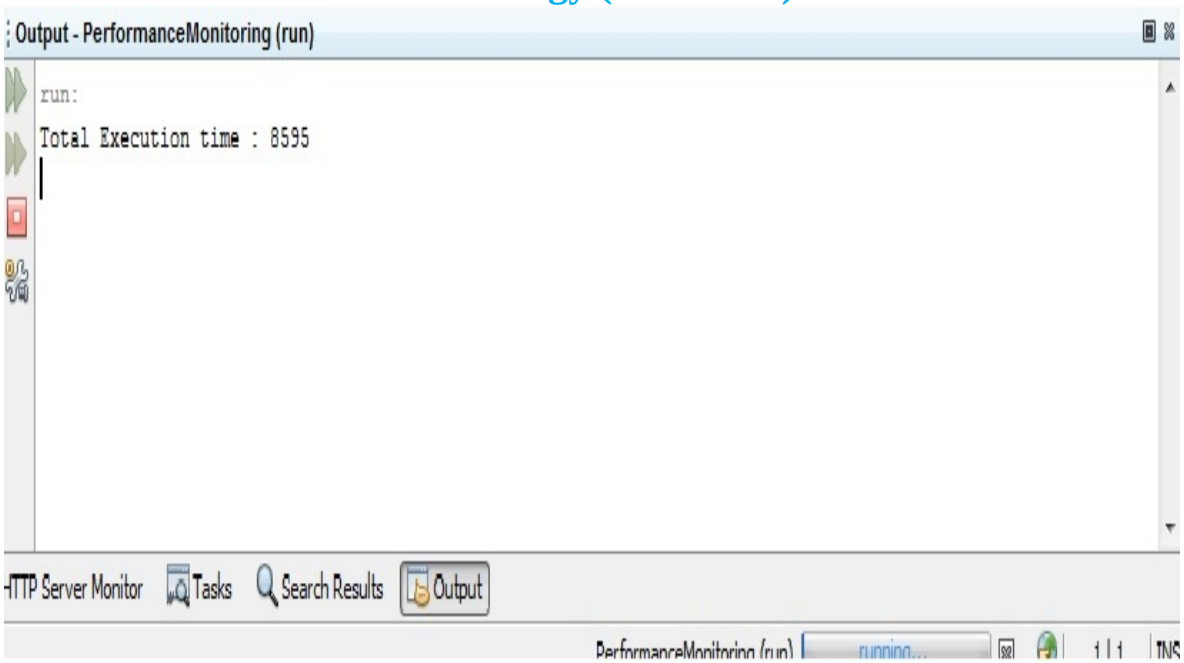

Fig. 3 Output –Execution Time

V. CONCLUSIONS

Even though so many automatic metrics exist, there is no single metric which can perform exceptionally well on all the language pairs and even if it does, it requires a huge corpus and other language resources which are not available as of now. Hence a metric such as this needs to be devised which can handle all the problems involved in evaluation of MT Output. Thus we hope that the system to be developed will not only be of good use to the Sutra Systems but will also be beneficial to us to understand the various stages of SDLC.

VI. ACKNOWLEDGMENT

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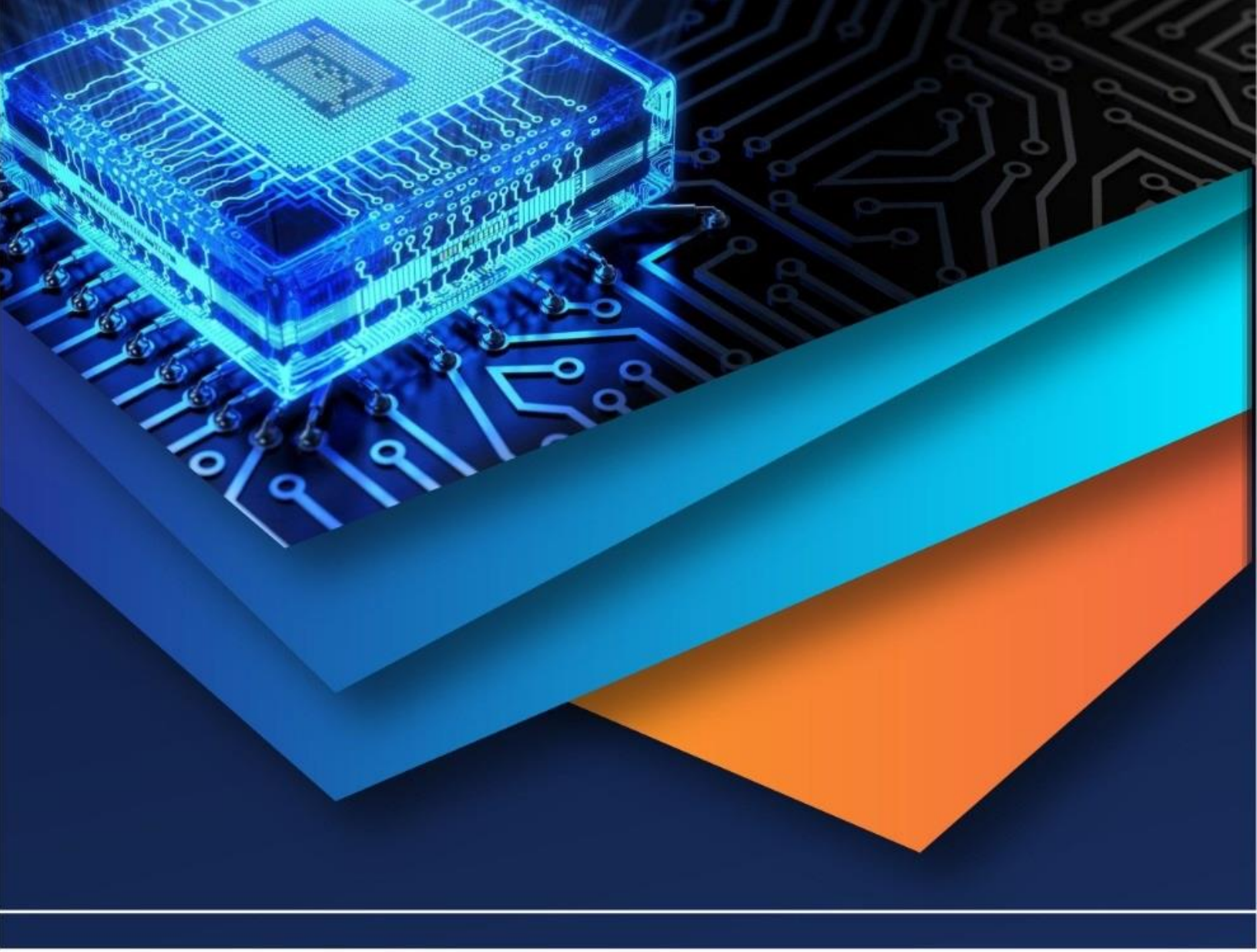

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