



# Bhilai Institute of Technology Durg

## **Department Of Information Technology**

**Group Number:**

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**Project Title: CHHATTISGARHI TO HINDI MACHINE TRANSLATION SYSTEM  
USING NN BASED APPROACH**

### **Problem Statement:**

- Chhattisgarhi, is a low resource language and is spoken by 24 million people.
- This language needs a translator, dictionary and a tag set so that it could be used in machines too so that it can be used in all soft wares.
- Government of Chhattisgarh is also facing problem in translation of any language to Chhattisgarhi Language.
- All the other languages have their own translators but till now no such translator has been designed for Chhattisgarhi language.
- Also the persons who are not native of Chhattisgarh face problems in learning this language as low resources are available.

### **Solution Strategy :**

- First of all we need to design a tag set so that we can properly provide tags to the words in the Chhattisgarhi language.
- After knowing and creating tag set with the help of linguistic expert we need to create a dictionary and a language parser.
- Then we need to manually tag the words and then check the accuracy with the help of the tools and various soft wares.
- For this purpose we are using corpus from various Chhattisgarhi websites. One of those website is
- Also neural machine translation will help as it aims at building a single neural network that can be jointly tuned to maximize the translation performance.

## **Innovativeness & Usefulness:**

- Since, Chhattisgarhi is low resource language so this will help the people to easily learn Chhattisgarhi.
- Nothing has been done for this particular new language yet, so this thing and tag sets are going to be very much useful for others.
- The dictionary and parser will be useful for other developers who will work in this field in future.
- This translator will help tourists and Government.
- This software have the ability to memorize and thus re-use common words and phrases.
- Also people who are not native citizen of Chhattisgarhi will get to know about this language.

## **Hardware & Software Requirement:**

- **REQUIREMENTS OF THE APPLICATION :**

Processor - Pentium

Memory – 1GB

Disk Space Required – 20 GB

Application Compatibility – Windows, Linux

- **REQUIREMENTS OF THE DEVELOPER :**

Processor – Pentium quad core

Memory – 4GB

Disk Space Required – 20 GB

Software Requirements – java 8, javac, php, js

Application Compatibility – Windows, Linux

**Project Guide:**

**Head of Department:**

**Project Coordinator:**