

Nepali Predictive Input Method

Aim

This research has be target towards any computer users, dealing with Nepali language in computing, with the aim providing full featured user friendly input method user interface.

Survey

Input method and tool for Nepali language exists but can't be used seamless with daily work. Most of the methods are *stand-alone* or *web-base* application or plugin which can't be used across application. Fortunately, this issue has been very well address by the *ibus*¹ project which is an input method framework for multilingual in Linux Operating systems. Although in current scenario two keyboard layouts for Nepali exist in *m17n project* under *contrib-db*², which is still just a key map.

Design & Creation

Using the *ibus-frame* work design the bridge between traditional as new input method with the predictive support. We could take the reference of some of the leading project *Heke Project*³ or *ibus-pinyin* which provide feature like spell checking too.

Experiments

1. Statistical frequency Analysis of the Nepali corpora to develop the well balance key-map.
2. Predictive text development using Nepali Corpora using Discriminative Language Model with Pseudo-Negative Samples Viterbi algorithm.
3. Using Memory Based Reasoning and in the conversion algorithm for transliteration.

Case study

An inquiry of log data for uses of Nepali language in day to day life like chatting, document work. An create creating the user-base-database for predictive text from volunteer user who choose to turn on the tracking feature.

Limitation

Only would be available for Linux base system the predictive text domain is relatively very small.

¹<https://code.google.com/p/ibus/downloads/list>

²<http://www.m17n.org/m17n-lib-download/m17n-contrib-1.1.13.tar.gz>

³Heke Project develop the "Anthy - The Japanese Input Method"