

# Predictive Keyboard

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**Abstract:** *Predicting the most probable word for immediate selection is one of the most high-ticket methods for enhancing the communication experience. With the growth in mobile technologies and the vast spread of the internet, socializing has gotten much easier. People around the world spend further and further time on their mobile affection for dispatch, social networking, banking, and a variety of other conditioning. Due to the fast-paced nature of similar exchanges, it's necessary to save as major as time possible while categorizing. Hence a prophetic textbook exercise is necessary for this. Text prediction is one of the most typically used approaches for adding the rate of communication. Still, the speed at which the textbook is prognosticated is also actually important in this case. The motive of this work is to design and apply a new word predictor algorithm that suggests words that are grammatically more applicable, with a lower burden for the system, and significantly reduces the volume of keystrokes required by users. The predictor uses a probabilistic language model grounded on the methodology of the N-Grams for text prediction.*

**Keywords:** Predictive Keyboard, Natural Language Processing, Corpus, N-Grams Model.

## REFERENCES

- [1]. Horstmann Koester, H. & Levine, S. (1996). Effect of a word prediction feature on user performance. *Augmentative and Alternative Communication*, 12, 155-168.
- [2]. Morris, C., Newell, A., Booth, L., Ricketts, I., & Arnott, J. (1992). Syntax PAL: A system to improve the written syntax of languageimpaired users. *Assistive Technology*, 4, 51-59.
- [3]. Nagalavi D, Hanumanthappa M (2016) N-gram Word prediction language models to identify the sequence of article blocks in English e-newspapers. *IEEE*. <https://doi.org/10.1109/CSITSS.2016.7779376>
- [4]. Kumar P (2018) An Introduction to N-grams. <https://blog.xrds.acm.org/2017/10/introduction-n-grams-need>. Accessed 26 June 2019
- [5]. Hernandez D, Calvo H (2014) CoNLL 2014 shared task: grammatical error correction with a syntactic N-gram language model from a big corpora. In: *Proceedings of the eighteenth conference on computational natural language learning: shared task*. CoNLL-53-59.