

Email Notifier using Named Entity Extraction

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Abstract: *Email plays an important role in communication due to its flexibility, simplicity, diversified types and low cost of information. Therefore processing a large amount of emails takes a tremendous amount of human power and time. In order to quickly extract the named entities from an email requires a computerized solution. So we had proposed a mechanism to extract named entities from emails. The proposed solution integrates technology like natural language processing and information retrieval. It performs the automatic extraction of named entities from an email, organises the named entities and notifies the user. Named Entity Recognition (NER) is a vital language processing tool for information retrieval from texts like newspapers, blogs and emails. NER performs classification of words and sensing the expression of text from unstructured data. spaCy may be a free, open-source python library for advanced language Processing. It is well known for production use and helps in building the system that performs understanding of text. It helps in information extraction, understanding the systems, and preprocess the text for deep learning..*

Keywords: E-Mail, NLP, Notification, NER, spaCy, iMap, Extraction

REFERENCES

- [1]. Han, Li-Feng Aaron, Wong, Zeng, Xiaodong, Derek Fai, Chao, Lidia Sam. (2015). Chinese Named Entity Recognition with Graph-based Semi-supervised Learning Model. In Proceedings of SIGHAN workshop in ACL-IJCNLP. 2015.
- [2]. Abdallah, Z.S., Carman, M., Haffari, G.: Multi-domain evaluation framework for named entity recognition tools. *Comput. Speech Lang.* 43, 34–55 (2017) .
- [3]. Einat Minkov, Richard C. Wang, William W. Cohen “ Extracting Personal Names from Email: Applying Named Entity Recognition to Informal Text ”Proceedings of Human Language Technology Conference and Conference on Empirical Methods in Natural Language Processing October 2005
- [4]. Swapnil, V., Jayshree, A.: Natural language processing preprocessing techniques. *Int. J. Comput. Eng. Appl.* XI(Special Issue) (2017). <http://www.ijcea.com/>. ISSN 2321-3469 .
- [5]. Zhou, GuoDong, and Jian Su. "Named entity recognition using an HMM-based chunk tagger." proceedings of the 40th Annual Meeting on Association for Computational Linguistics. Association for Computational Linguistics,2002.
- [6]. Juan Li , Souvik Sen , Nazia Zaman . “Entity Extraction From Business Emails” August 2015 *International Journal of Information Technology and Computer Science* 7(9):15-22
- [7]. Stolfo, Salvatore J., Shlomo Hershkop, Chia-Wei Hu,Wei-Jen Li, Olivier Nimeskern, and Ke Wang. "Behavior-based modeling and its application to email analysis." *ACM Transactions on Internet Technology (TOIT)* 6, no.2 (2006): 187-221.
- [8]. Saleem, Ozair, Latif, Seemab. “Information Extraction from Research Papers by Data Integration and Data Validation from Multiple Header Extraction Sources.” WCECS 2012,October 24-26, 2012, San Francisco, USA.