

English-Chinese Corpus Collection and Translation Wisdom Algorithm Implementation Based on Ajax+jQuery

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Abstract: This paper firstly introduces the discussion of "representativeness" in the construction of translation corpus abroad. Jie Cao pointed out that under the circumstance that the current theoretical research is still very familiar, the construction of the English-Chinese translation bank should be based on this. From the point of view of "translating and breaking the c-test", it takes the construction of "the core of eucalyptus" as the breakthrough point. This paper discusses the functional design of the college student information management system using the jQuery framework and AJAX technology and using the multi-layer architecture. It constructs a student-centered teaching corpus and applies it to teaching practice. Taking the comparative translation teaching method as the guiding ideology, it discusses the specific measures to apply the translation corpus in the process of college English translation teaching.

Keywords: English-Chinese Corpus Collection, Translation Wisdom Algorithm, Ajax, jQuery

1. INTRODUCTION

Teaching using computer network technology has become one of today's modern teaching methods, breaking the traditional teaching mode. Many school teaching, management models and teaching assessments cannot work normally without computer network technology [1]. Using computer network technology as a teaching mode will maximize educational resources, and the original class personnel will change [2].

In this process, the student data collected by various departments are not the same, and the accuracy of the data cannot be directly measured [3]. At the same time, the payment of tuition fees of students is also different every year, and the charging standards will change. Various tariff information such as loans will also change to avoid high temperature expansion causing scratches between the rotor and the stator [4].

However, the sudden disappearance or step drop of the braking torque caused by this increases the safety hazard of service braking, especially for cars driving on long-distance downhill roads [5]. Among them, bilingual and multilingual corpora can also be divided into parallel corpus and comparative corpus according to the organization of corpus. The corpora collected in the parallel corpus form a translation relationship with each other, and are mostly used in bilingual dictionary compilation, teaching Chinese as a foreign language, machine translation and other researches [6]. Extensive collection and arrangement of English-Chinese/Chinese-English bilingual materials related to historical and cultural tourism resources in Luoyang area to build the wisdom of Luoyang area the tourism English-Chinese/Chinese-English bilingual corpus is applied to the scenic spot information intelligent question answering system and the automatic simultaneous interpretation English-

Chinese/Chinese-English bilingual manual online service system [7].

The method of dialectical language and language collection library imposed on the emerging disciplines and research sections of the development of cake balls in the late 1950s [8]. Some people call it structuralism and glaze functionalism. Huan's Brick Code" (Gu Muxiao 1998. 1). The system uses ASP. NET technology, C# language and SQL Server database have been developed. In the development process, in order to improve system performance, the popular jQuery framework and asynchronous development technology AJAX are adopted [9]. At the same time, for the follow-up improvement and expansion of the system, the practical application ability of the language is progressing slowly, and due to the lack of internship opportunities in the practice base, the demand for practical talents is far from the enterprise's demand for practical talents after entering the workplace [10].

It can be seen that in order to adapt to social development and meet the needs of the society for Korean application-oriented talents, the three-tier architecture technology and Ajax technology are studied, and the system architecture of the target system is based on the system design principle [11]. Design of functional modules and overall system design, and at the same time give the design of the online examination platform optimized by Ajax technology. From the late 1990s to the beginning of the 21st century, my country's corpus linguistics has developed vigorously, and the development, construction and application of corpora have entered a period of prosperous development [12].

Especially in modern Chinese, dictionary compilation, teaching Chinese as a foreign language and research on Chinese history have been more and more applications [13]. Only by constructing a bilingual corpus of smart tourism and applying it to the corpus-based machine translation and the

intelligent question answering system of scenic spot information can it be beneficial to improve the communication and inquiry of foreign tourists in tourism activities, thereby enhancing the international reception capacity of tourism enterprises, and for the construction of International smart tourist attractions provide strong support. Some scholars have done some research in this regard [14].

ASUSTOR's master's thesis "Research on Talent Cultivation Model of Independent Colleges in Chinese Universities" defines the talent cultivation mode of independent colleges and introduces relevant theories in detail [15], and then investigates and analyzes the talent cultivation situation of some independent colleges. Corpus as an auxiliary tool used in language teaching is an emerging research field in applied linguistics [16]. The corpus collects many real language materials, and the use of advanced retrieval software is of great benefit to translation teaching, making it possible to quickly analyze a huge amount of language data. So that translation researchers can make full use of the parallel corpus observation and observation of English and Chinese bilinguals [17]. Describing the language of translation, mastering the law of transformation between English and Chinese in the process of translation, and understanding the principles of the transformation of some specific words or structures are translation studies [18].

2. THE PROPOSED METHODOLOGY

2.1 The Ajax+JQUERY

Data access layer: also known as persistence layer, mainly responsible for database access, that is, to realize the operations of select, insert, update, and delete on the data table. ASP.NET's code execution method is compiled, different from interpreted. Run the program based on the common language on the server, the program code is compiled when the server runs for the first time, and the system directly executes the compiled program, which is much more efficient.

It greatly simplifies the operation of JavaScript developers and is widely used in current programming technology. In this system, interface control, dynamic menu, form validation, and data manipulation with AJAX are completed. When writing Web applications based on AJAX technology, it is a particularly useful ability to manipulate DOM tree nodes through JavaScript. Compared with traditional web applications, we only need to change some nodes in the DOM tree through JavaScript programming. The multi-layer architecture can solve the problems of the above three-layer architecture, and is also conducive to standardization and reuse of various logics. In a nutshell, a multi-layered design can be achieved: decentralized attention, loose coupling, logic reuse, standard definition. The biggest benefit of a multi-tier architecture is loose coupling.

2.2 The English-Chinese Corpus Collection and Translation

The software used in this corpus collection is Nutch, a web search engine that has just been born with open source code. Compared to those commercial search engines, Nutch as an open source search engine will be more transparent, so the results are more trustworthy. The travel corpus is not only limited in the field, but also severely limited by the region. The tourism corpus of one region is usually quite different from the tourism corpus of another region.

The English-Chinese/Chinese-English bilingual tourism corpus collected in this study mainly includes: (1) English-Chinese/Chinese-English bilingual documents about the tourism resources of Luoyang area published in China. Basic theories of listening, speaking, reading, writing and translation of Korean and the basic skills of mastering the practical application of Korean; preliminary ability to analyze and solve practical problems related to Korean. The bilingual parallel corpus mainly comes from the real questions and simulated questions of half-sentence translation for CET 4 and 6. It allows students to learn independently and plays a strong guiding role in meeting the CET 4 and 6 exams.

After all, the classroom time for college English teaching is limited, and it is very important for teachers to guide students to conduct effective autonomous learning outside the classroom during the teaching process. The translation of the same translator and the original written by the translator in the target language are extracted through the joint retrieval function of multiple works. and ten-day-length statistics to compare vocabulary range, vocabulary changes, and sentence length. After the system operating environment is installed, Nutch can be installed and debugged. There are two types of crawler components that come with Nutch, one is for crawling a few websites, using the crawl command: the other is for crawling the entire Internet.

2.3 The Smart Algorithm for English-Chinese Corpus Translation Based on Ajax+JQUERY

Ajax+JQUERY-based translation wisdom algorithm for English-Chinese corpus Specification", the alignment unit is sentence level. The core of the English-Chinese/Chinese-English bilingual manual online service system supporting automatic simultaneous interpretation is automatic machine translation and speech recognition technology. The automatic speech recognizer and speech synthesizer in English-Chinese/Chinese-English bilingual speech recognition technology have developed quite maturely and have been widely used.

In the basic stage (freshman, sophomore), in addition to the practical part in the classroom, many practical teaching activities are arranged, such as: pronunciation competition, speech competition, calligraphy competition, Korean simultaneous interpretation, Korean broadcast, self-recommendation, Korean Cultural Week, etc. Distance iconicity refers to the distance between linguistic symbols and the distance between the conceptual components to be expressed. That is to say, the separation distance between language symbols often directly reflects the conceptual distance in the human brain. A sentence is the basic unit of translation, and a word is the smallest structural unit that expresses the meaning of a sentence. Therefore, translation is inseparable from the precise grasp of the meaning of words. Since translation involves at least two languages, and one of them is likely to be the translator's second language, it is particularly important to grasp the semantic prosody of the target language or source language vocabulary as the second language.

This time, 1728 webpages were crawled, with a capacity of 18.2MB and about 15,000 sentence pairs. They were saved in plain text files, namely txt format, and UTF-8 encoding was used. The encoding takes one byte for one letter and two characters for one Chinese character. It is more economical and applicable to texts mixed in English and Chinese. Use the

"Check Paragraph Alignment" function provided by the "Smart Travel English-Chinese/Chinese-English Parallel Corpus Sentence Alignment Processing Platform" to check whether paragraph alignment can be achieved before parallel corpus sentence alignment processing. The processing platform is executing the "Check Paragraph Alignment" function.

3. CONCLUSIONS

Design and implementation of online standardized test platform based on Ajax+jQuery, based on ASP.NET, jQuery, AJAX technology, using B/S three-tier structure system, the development platform is Microsoft's VS2010, and the development language is C#, JavaScript, etc. A parallel translation corpus is proposed for translation research, translation practice, translation evaluation, translation teaching and automatic translation, and fully realize the role of parallel translation corpora in learning, practice and other fields.

4. REFERENCES

- [1] Gong Xulin. Design and implementation of online standardized test platform based on Ajax+jQuery [D]. Dalian University of Technology, 2014.
- [2] Zhang Hua, Jing Xiangdang, Zheng Guoxun. Design and implementation of a multi-layer architecture based on jQuery and AJAX technology for college student information management system [J]. Journal of Changchun Institute of Technology: Natural Science Edition, 2013, 14(3): 5.
- [3] Zhao Zengmin, Li Huimin. Ajax application development based on jQuery framework [J]. Manufacturing Automation, 2012, 34(19):3.
- [4] Hu Silian, Shao Xiongkai. Design of online bookstore management system based on AJAX and JQuery [J]. Enterprise Technology Development: Mid-term Issue, 2012(4):2.
- [5] Pan Jie, Zhou Chuansheng. Web Research and Implementation Based on jQuery Framework [J]. Journal of Shenyang Normal University: Natural Science Edition, 2015, 33(1):4.
- [6] Su Qibo. Design of hospital information technology system based on cloud computing [J]. Information and Computer, 2022, 34(9):3.
- [7] Zhu Lili, Wang Wenbin. The Spatial and Temporal Differences in Concepts and Functions of Progressives in Modern English and Chinese [J]. Journal of Foreign Languages, 2022(2):12.
- [8] Sun Guodong. Research on the Construction of English-Chinese Interpretation Teaching Corpus from the Perspective of Lens [J]. Overseas English (Part II), 2021, 000(005):58-59,83.
- [9] Kang Jie, Qu Yiwei. Ajax-based mobile application data collection and analysis [C]// Papers of the 23rd China Digital Radio and Television and Network Development Annual Conference and the 14th National Internet and Audio and Video Broadcasting Development Seminar Episode. 2015.
- [10] Gong Xulin. Design and implementation of online standardized test platform based on Ajax+jQuery [D]. Dalian University of Technology.
- [11] Ji Hongbo. Design and Implementation of jQuery-based Web Source Program Online Evaluation System [D]. Jilin University, 2011.
- [12] Feng Xiaoxin. Teaching interactive platform based on Ajax and jQuery [J]. Computer Knowledge and Technology: Academic Edition, 2011, 7(1):3.
- [13] Xin Gang. Research and Development of Web Application Based on JQuery Framework [J]. Electronic World, 2014(11):2.
- [14] Lei Yongheng, Hu Jian. Design and Implementation of Weather Radar Operational System in Hunan Province [J]. Guizhou Meteorology, 2020, 044(004):77-83.
- [15] Qi Baohui. Design and Implementation of MIS System for Translation Company Based on .Net and Ajax Technology [D]. Nankai University, 2009.
- [16] Yang Feng, Chen Fudan, Zhong Zhiqiang. Framework design and implementation of library management system based on Ajax technology [J]. Software Engineer, 2014(11):2.
- [17] Ma Weifeng, Wang Xiaorui, Gao Songfeng, et al. WebGIS development based on server dynamic cache and Ajax technology [J]. Surveying and Mapping Science, 2008, 33(5):204-205.
- [18] Zhao Yizhe. On the temporal and spatial differences of Chinese and English idioms.