

Research direction: digital knowledge system of the theory, technology and practice knowledge system consists of digital publishing systems, digital libraries, digital archives and digital museum, science popularization system, digital culture system on the basis of digital content knowledge and the core of content creation, distribution, collection and preservation system, application and support network under the condition of digital content creation, knowledge organization, information communication, knowledge dissemination, data mining, application and re-creation, long-term protection, etc., and is becoming more and more embedded teaching, scientific research, culture and management of application scenarios and process, support network intelligent knowledge service.

Digital knowledge system is one of the origin of the digital library system, but the digital knowledge systems have covered all kinds of knowledge resources and knowledge intensive organizations, industry and application, focusing on the all kinds of native or derivative of digital content and knowledge discovery, invention, organization, integration, analysis, description, retrieval, utilization, conservation and management, and evaluation of common challenges, and gradually include the integration of associated multiple heterogeneous digital knowledge systems, including step by step based on the mass distribution of digital content knowledge discovery and knowledge construction, including embedded step by step in the process of scientific research, education, culture and management knowledge creation and utilization of knowledge.

In view of this, this research direction will closely follow the development of digital intellectual environment and all kinds of knowledge system at home and abroad, focus on the morphology and structure of digital knowledge system, the creation of digital knowledge object and organization, discovery and analysis of digital content, personalized embedded digital knowledge service, all kinds of application environment and the process of long-term preservation of digital knowledge support system, knowledge resources, management and evaluation of digital knowledge system study and research in the system, especially combined with digital science and technology, education and cultural fields in China of the practical need of knowledge service, standard specification for digital content and services, knowledge organization and build mechanism, open and integrated system structure, knowledge discovery and knowledge fusion technology, digital environment and knowledge support system for further research and application experiments.

Professional examination courses in this area include:

*Theory and practice of digital knowledge system*: concentrates on the development trend of all

kinds of digital knowledge system, the basic form, the key example, major construction and management practice, and the object of knowledge creation and organization, digital knowledge service and knowledge oriented application environment and application process of basic theory and practice of digital knowledge support services.

*Technology and system of digital knowledge system*: focusing on examining the specific technologies, methods and typical systems of digital knowledge system in support of object creation, description and organization, discovery and integration, mining and analysis, system structure, etc.

Zhang Xiaolin: male, doctor, researcher. He received his PhD in library science from Columbia University in 1992 and was a senior visiting scholar in the school of information science at the university of Pittsburgh from 2000 to 2001. From 1984 to 2001, he was a professor at Sichuan university, director of the department of information management and deputy dean of the school of management. In 2001, he was elected to the "hundred talents program" of the Chinese Academy of Sciences. Served as the sections of the management committee, academic committee, now the vice director of China library, *Data analysis and knowledge discovery (original books intelligence modern technology)*, the editor of Journal of *Data and Information Science* (English edition), independently or cooperatively publish 5 professional academic works and published more than 100 papers, obtained 3 national and provincial scientific research or teaching awards.

Dr. Zhang's main research fields include digital library technology and system, digital object and metadata technology, knowledge organization and knowledge construction technology, knowledge discovery and information analysis technology, open integrated system technology, and digital resource long-term preservation technology.