Fast Language Token Recognition Algorithm applied to increase performance of Internet HTTP Web Servers

Joseph Myers, Victor Isakov and Dharam Chopra
Department of Mathematics and Statistics, Wichita State University

We present a paper, computer programs, and source code which enable fast recognition of a finite set of language tokens. The recognition algorithm can write the source code for a computer program which provides a recognition function for any list of keywords. The resulting input recognition time is minimized and results in a 20% improvement for HTTP transmission speed, and much higher improvement for markup language parsing such as XML and HTML. The recognition system is also applied to determination of Multipart Internet Mail Extension registered file types, to spam filtering, and web-based email applications.