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Abstract

Intelligent Web Pre-Fetching Method

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Network-accessible resources are developed at a rapid rate. Fast response time is become an important issue. Increase network bandwidth can help but can't reduce Web latency caused by overloaded server, Round Trip Time etc. Caching accessed files can help but hit rate is usually 30-50%. A number of research find that pre-fetching is another way to help, but improper pre-fetching will cost the dramatic increase in network traffic. The current available pre-fetching approaches are all based on the statistical analysis on the past access pattern of general user. It may not correctly show the access pattern of each individual user since different users may have different access pattern (interest). It is the intention of this paper to propose a pre-fetching model which is based on the access pattern of each individual user, it's prediction is based on the content of the user accessed web pages. This prediction algorithm is a breakthrough against the existing ones.

**Keywords:** Web Latency, Web Pre-Fetching, Web Caching.