The Masters of Software Engineering

At Wang Institute, you’ll find a community of professionals working toward a common goal: leadership positions in software engineering and project management.

Our MSE program gives you a practical foundation in the technology, methodology and management of software development. An integrated core curriculum consists of Formal Methods, Programming Methods, Software Engineering Methods, Computing Systems Architecture, Management Concepts and Software Project management. A variety of elective courses are offered each semester, and two project courses precede the degree.

This outstanding curriculum is complemented by a dedicated faculty, a sophisticated computing facility and a country setting outside of Boston. It’s an excellent educational environment for developing the skills to specify, design and implement cost-effective software systems.

Wang Institute of Graduate Studies

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Years of Software Development Experience: ______

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memory. This technique effectively uses unoccupied spaces from previous applications of algorithm CBK. The sample session illustrates this technique using 100-word chunks (because of space limitations) that are nonminimally hashed. If the lexicon cannot fit into memory, it is appropriate to treat the medium-size lexicon as a large lexicon.

Since large lexicons typically require secondary storage, a major concern is to minimize retrievals from secondary storage. The CBK algorithm can include the 732 most frequently used English words in a single almost-minimal hash table, giving one-probe retrieval in 75 percent of the cases.

A second hash function could map the remaining approximately 50,000 words into 50 subsets of about 1000 words each. This second hash function could be based on the ordinal positions of letters in the alphabet, rather than on the machine character code, to preserve machine independence. The 50 subsets of 1000 words each could be stored separately in secondary memory. For each subset, an almost-minimal perfect hash function could be computed, storing the associated values in the same secondary memory location as the lexical information itself.

If the key we are searching for is not in the table of most frequent words, then a hash would be performed to select the proper second-level table from a secondary storage medium; this table would then be searched using its own perfect hash function. This organization would allow us to retrieve any key with three hash calculations and one probe of secondary memory.

Though Cichelli’s algorithm provides a useful alternative to numerical approaches to the search for perfect hash functions, the LF s of the solutions produced degenerate quickly for key sets of more than 50 keys. Furthermore, the mechanism used for distinguishing keys is not adequate for many problem sets. Refinements led to the development