DR DONG-KEUN SHIN

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Inviting challenges openly, Dr Dong-Keun Shin proclaimed that if none occurred, he would lead people in computer science from the beginning of the 21st century. Born in 1959, he grew up in Seoul, Korea. Even in Kyonggi Elementary School he had a dreamlike interest in creating his own theoretical world. In his youth the calculus of British scientist, Sir Isaac Newton, and geometry of Greek scientist, Euclid, set clear examples for him to understand the most valuable achievement that a human being has ever had. After graduating from Posung High School, he emigrated with his family to the USA in early 1978, for better education.

In the USA he was amazed by the Grand Canyon as a God-given wonder and impressed by the computer, a brilliant human feat of engineering. He had a chance to understand not only the potential of computers, but also the possible computational theories that he could obtain in the early stage of computer science. To realise his boyhood dream, he majored in computer science at the University of California at Berkeley and at the George Washington University, hoping to gain either scientific theory for his academic pursuit or at least some engineering experience for his livelihood. While an undergraduate he worked for the EECS Department at UC Berkeley as academic computing coordinator. He lectured in both computer hardware and software courses at George Washington University in his graduate years. He became a US citizen in 1987. As an engineer, analyst or programmer he worked for several companies, including British Telecommunications (Dialcom), Xerox, CBSI, SRA and Samsung Electronics. His current research interests include computer science theory and database systems. Married to Helen Chang, MD, since October 1991, he has two sons, Paul J and Lucas J, who are expected to be scientists.

While surveying hash functions for his doctoral dissertation, Dong-Keun Shin verified for the first time that there is no distinguishable difference between the performance of one relatively good and data independent hash function and that of another. He coined the term "phenomenon of relatively good (RG) solutions" in reference to the verification. Based on the first verification of the kind, he developed the hypothesis that the phenomenon of RG solutions is present in each group of polynomial time solutions for complex problems that basically require exponential time algorithms as solutions. His verification shows that no matter how fast computers can calculate, they virtually cannot solve such complex problems. By inference, there will be no such robot that can act almost like a human being, as those in science fiction and movies do.

Dr Shin perceived that in computer science the person who discovers the best solution for a frequently encountered generic problem may own a theoretical world and gain great credit in terms of contribution. Dr Shin's significant contributions also include his discovery and proposal of best algorithms in the areas of sorting, hash functions, massive cross-referencing or the join operation, and polygon clipping. His papers show that his algorithm for massive cross-referencing or the join, with its several versions, is the best of its kind to date and Shin's (mapping) hash function is the best hash method.

Grand Canyon, USA

In early 1997 Dr Shin confidently challenged the world's academic communities and computer scientists to refute the legitimacy of his verification and discoveries as well as his claim to achieving the greatest contribution to computer science. For the purpose, he sent more than 5,000 letters to about 170 countries in the world. Each nation's one or two highest political leaders, minister of education or equivalent, chairman of UNESCO, and heads of major universities and colleges,
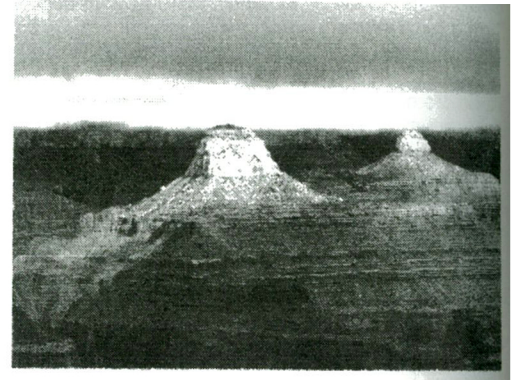
received his letter at that time. He also needed the mailing action to verify the ownership of his ideas and to prevent any plagiarism. As yet he has encountered no serious challenge.

On 3 July 1998 Dr Shin discovered a new sorting algorithm, Shin sort, which is the best solution to sorting and searching. By solving the most important problem in computer science, he secured his position as the greatest computer scientist. Through Shin sort and search database management system Shin's trees will be created in main or local memory for very fast text/image/sound data retrievals. He hopes that the new database systems will take computers into a new era of optical speed networking. Announcing his accomplishments, he sent letters to 1,200 press-related organisations worldwide in April 1999. He will write about the theory of sorting and searching and publish computer science textbooks.

Further information about Dr Shin's achievements is given in his research collection entitled "A Collection of Research Processes for Genealogy and Proofs", which have been submitted to the chairperson of the EECS Department at the University of California at Berkeley. Dr Shin's biographical details appear on his web site (www.dkshin.com) and in several books including Outstanding People of the 20th Century, Leading Intellectuals of the World Millennium Issue; Five Hundred Leaders of Influence, 2000 Outstanding Scientists of the 20th Century, 1000 Leaders of World Influence and some International Who's Whos. In Seoul, Korea, he lectured on computer-based systems for an introduction course at the University of Maryland's Asian Division in 1997. He is also involved in managing his family-owned Hwa Shin Building in downtown Seoul. Although Dr Shin has accomplished his long held dream of owning a theoretical world, he will serve mankind with his academic talent.

'My aspirations for the New Millennium are: 'To lead people in computer science and to publish textbooks to educate young students, even in middle high and high schools, on the truths that have been discovered in computer science. In their early ages, they will experience the fact that not only mathematics but also computer science can enlighten them in their views on theory. The enlightened student may do his best in creating his own theoretical world, wherever he chooses to study'.