A Tribute to Professor Hongjun Lu

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Dr. Hongjun Lu, Professor of Computer Science, Hong Kong University of Science and Technology, lost his brave fight against cancer and left us in the evening of March 3, 2005. The world lost a dedicated and brilliant computer scientist. The database research community lost a respected and prolific researcher, an effortless organizer and promoter of database research in the world, a friend cherished by many colleagues and researchers, and a wonderful teacher who deeply affected and was revered by his students.

In response to this sad news, messages of condolence flooded into the Hong Kong University of Science and Technology from all over the world. Hundreds of memorial messages are posted on the HKUST website paying tribute to him, and hundreds of wreaths and flowers lined his memorial service. Reading those touching words from all over the world, from Asia, Australia, North America, and Europe, one can clearly feel the impact of Hongjun's departure. His dedication and his contributions to our community will live forever in our hearts.

Hongjun received his B.Sc. from Tsinghua University in China, obtaining his M.Sc. and Ph.D. degrees from the University of Wisconsin-Madison. After a short span of successful research at Honeywell, Hongjun moved into academia, taking a faculty position at the National University of Singapore (NUS). His twelve years of dedication at NUS led to a "sea change" for database research in Singapore, as NUS today is a major stronghold in database research. In 1998, Hongjun joined the faculty at the Hong Kong University of Science and Technology. There he set out to organize a strong database research thrust in Hong Kong and China, and he contributed greatly to raising the research level in the region and attracting major international database conferences there.

Hongjun was an internationally recognized database researcher. He leaves a tremendous legacy with his seminal work on data and knowledge base management systems, query processing and optimization, physical database design, database performance, data warehousing, and data mining. His query processing and physical design research examined join processing, indexing and query evaluation for object-oriented and XML databases, parallel query processing, transitive closure, grid query processing, and multi-query optimization. His research on knowledge base management and data mining included work on classification using neural networks, association rule mining, data cube computation methods, text classification, frequent pattern mining, and learning-based web query processing. Most recently, he had started to work in the emerging area of stream data processing. His prolific career spanned 20 years—his work as a graduate student appeared in ICDCS'85, VLDB'85, ICDE'86 (which won the best student paper award), and SIGMOD'86, and this past year, his technical productivity was still as high as ever, leading to an ICDE'04 paper, a SIG-MOD'04 paper, three VLDB'04 papers, and two ICDE'05 papers. In all, Hongjun co-authored over 200 publications in scientific journals, conferences, and workshops during his 20 years in the field. In addition, he gave many tutorials, invited talks, and keynote talks in international and regional database-related conferences. His level of contribution is remarkable, even more so given that he spent the bulk of his career working in the Far East, away from the usual geographic centers of database research.

Besides his research, Hongjun devoted a great deal of time and energy to selflessly serving the database community. He served as a member of the ACM SIGMOD Advisory Board from 1998 to 2002. He became a Trustee of the VLDB Endowment in 2000 and was its secretary at the time of his death. He was an Editor for IEEE Transactions on Knowledge and Data Engineering, Knowledge and Information Systems: An international Journal, and a Springer-Verlag book series on Database Management and Information Retrieval. He served on program committees and organizing committees for all of the major international database conferences and workshops, including the SIGMOD, VLDB, ICDE, SIGKDD, and ER conferences. In addition, he was the founder and the Steering Committee chair for two regional conferences in the Far East, the Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD, which began in 1997) and the International Conference on Web-Age Information Management (WAIM, which started in 2000).

Hongjun worked hard to raise the level and visibility of academic database research in the Asia-Pacific region. This began when he was a young faculty member at NUS, where he helped to build an internationally known database research group. He also worked to promote quality database research in mainland China, helping to cultivate internationally active database groups there and to coach young Chinese faculty and students to conduct quality research and to publish at quality database conferences. Hongjun was a bridge between the international and mainland Chinese database communities. He served as a liaison for ACM SIGMOD to the Database Society of the China Computer Federation, recruiting ACM SIGMOD members from China, and he was an organizer of the VLDB Database School (China), starting in 2002, which was set up to train young faculty members and senior research students in the field.

With his devotion to family, friends, research, and teaching, Hongjun leaves behind a vast number of grieving people on four continents whose lives were touched and improved by his presence. He was a role model for many of us over the years, and he will live on in the memories of those who knew him. We will always remember Hongjun's intelligence, his enthusiasm, his smile, his kind-heartedness, and his unselfish dedication to the advancement of our field. He will truly be missed around the globe.