

2007 Board of Trustees' Award for Outstanding Research and Creative Scholarship Recipient

Professor Elke Rundensteiner

Professor Elke Rundensteiner is an internationally known leader in the database management research community. She has produced seminal work in several areas, including the maintenance of extensible and evolving schema and the optimization of queries over complex, distributed, and changing database systems.



One of her international nominators writes:

"[She] is a very strong researcher, always at the forefront of research, whose work is highly influential and is of interest not only to academia but also to industry. She is a leader in the database field and a great educator."

Professor Rundensteiner's latest research demonstrates her ability to spot cutting edge and important research topics, then move her efforts to tackle them. This work on Continuous Stream Query Processing is motivated by the huge amounts of data being collected and transmitted by sensors, antennas, and other digital devices.

Funding for Professor Rundensteiner's research has come from many sources, including NASA, NIH, and NSF, from which she won a Young Investigator Award in 1994. She has also attracted industrial support from Intel, AT&T, IBM, Verizon and Hewlett-Packard.

Her extensive list of publications spans nearly all of the top database journals and conferences. She has written over 60 peer-reviewed journal articles, 200 refereed conference papers, and 13 book chapters. She has 17 papers published in IEEE Transactions on Data and Knowledge Engineering, the most highly respected journal in the field.

Another nominator writes:

"Aside from being a prolific and quality researcher, Elke has impressed the international research community with her emphasis on validating her theories via practical implementations. Elke is unique in bringing theories to practice..."

To help her in generating this impressive output of theories, implementations and publications, she has directed (or is currently directing) 25 Ph.D. students plus more than 20 Masters students.

One nominator commented on her outstanding contributions as a Ph.D. supervisor:

"Not only is she successfully supervising a large number of students but she selects projects that give her students excellent training, opportunities for team work, and challenging research problems. I have interacted with several of her students and I have always been impressed with their quality and enthusiasm."

Professor Rundensteiner is particularly noted for her mentoring of female students. Given the alarmingly small percentage of female participation in Computer Science at all levels, her mentoring efforts are extremely important.

One of her female Ph.D. students wrote the following in her letter of support for Elke's nomination:

"And while it may seem that Elke could conduct all the research herself (indeed, she probably could), her true strength lies in her ability to inform and inspire students, both graduate and undergraduate, towards working on research problems. Elke has consistently had a diverse set of students, with various backgrounds (ethnic and educational) and of various strengths, all working on common research areas. This speaks to Elke's ability to organize her research team and to draw out their strengths."

"As her student, I was always amazed that she could find the time to meet at the spur of the moment, often in a busy, harried day, and still focus on the research problem at hand, immediately understanding the issues and providing direction for the next steps. When I was discouraged or uncertain, Elke would provide the inspiration and the confidence to continue."

"She is compassionate to those in trouble and willing to spend extra time away from her busy family and professional life to help those that need it. Elke is a source of inspiration, a mentor and a superb role model."

In recognition of her many significant contributions to the field of Database Systems, her constant source of new ideas in Data Management, and her leadership role in supporting and developing student research, it is with great pride that Elke Rundensteiner is named the recipient of the 2007 Board of Trustees' Award for Outstanding Research and Creative Scholarship.