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Diane Crawford

Jim Gray: Humble Visionary

It's been almost two years since Jim Gray set sail off the coast of Northern California headed for the Farallon Islands, never to be seen again. While we can only imagine the impact of his loss to family and close friends,

his absence these long months has also resonated deeply within the computer science community.

"Visionary" and "humble" are words often used in the same breath by friends and colleagues to describe Gray. His contributions to computer science are too numerous to tackle on this page; indeed, even in this issue. He received the ACM A.M. Turing Award in 1998 for his contributions to computer science, particularly his work in database technologies and transaction processing that paved the way for today's global e-commerce markets. In later years, up to the time he went missing (Jan. 28, 2007), he would become deeply fascinated and totally immersed in the world of astronomy, lending his scientific acumen to a new area of research and wonder.

His loss has also been felt intensely in the publishing world. A quick search of the ACM Digital Library finds well over 100 articles and papers published under his byline. His contributions to ACM's Special Interest Group on Management of Data (SIGMOD) are legendary throughout the association. Last May, ACM, along with the IEEE Computer Society and the University of California, Berkeley, hosted a tribute to Gray where dozens of friends, family, and colleagues recalled their fondest memories of this gifted yet unassuming computer scientist, pioneer, teacher, astronomer, mentor, and friend. The June 2008 issue of SIGMOD Record (www.sigmod.org/record) included the full collection of talks and tributes from this event; I encourage

you to read how one person can influence so many lives.

Gray's efforts on behalf of ACM's magazines were equally stellar. He wore many hats throughout his career, having been a scientist, scholar, researcher, and practitioner. He was quick to recognize the need for a publication to address the young practitioner entering the IT field. He was a founding board member of ACM's pioneering *Queue* magazine, created to provide young professionals with the information they would need to stay ahead of the learning curve and understand the technologies that would come into focus over the next 12–18 months.

Gray was also instrumental in the initial discussions to reposition *Communications* as a trusted source for research, as well as of practical and trend-setting editorial content. Indeed, he was an early proponent of presenting computing research in a manner that could be appreciated by both scientists in the field and by a broad-based audience. He understood the editorial interests of academics and practitioners intimately, believing there were ways to satisfy them all within ACM's flagship publication. Just months before his disappearance, he lent his support to *Communications'* Research Highlights section, nominating a paper by Chris Stolte, Diane Tang, and Pat Hanrahan on the Polaris system for query, analysis, and visualization of multidimensional databases. So enthusiastic was Gray about the paper, he wrote the origi-

nal Technical Perspective that would ultimately accompany it here; we are pleased to present both pieces in this issue, beginning on p. 74. We also are grateful to David Patterson, co-chair of the Research Highlights Board, for updating the work of his friend and colleague to reflect changes to the system over the past two years.

Also appearing in this issue, we present two especially memorable presentations from the Berkeley tribute. Fellow pioneers in database research Michael Stonebraker and David DeWitt recall Gray as a distinguished computer scientist, listing his multiple contributions to the field of database systems and his memberships in the National Academy of Sciences, National Academy of Engineering, American Academy of Arts and Sciences, European Academy of Science, as well as a fellow of both the ACM and IEEE (p. 54). And Alexander Szalay, a professor in the Department of Physics and Astronomy at Johns Hopkins University, writes of Jim Gray the astronomer (p. 58), noting how his own collaboration with Gray created some of the world's largest astronomy databases, enabling astronomers to test many avant-garde ideas in practice and see the cosmos in ways never before possible.

We hope you enjoy this collection of memories and work of and about Jim Gray. While the man and scientist is sorely missed, his legacy of work lives on in all of us.

Diane Crawford
EXECUTIVE EDITOR