# Jim Gray at Berkeley

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# ABSTRACT

Jim Gray spent a decade as a student and researcher at Berkeley. In action, he is remembered for his breath, his depth, and his generosity.

# **Categories and Subject Descriptors**

K.1 [History of Computing]: People

#### **General Terms**

Algorithms, Design, , Theory

#### Keywords

Research, history, Berkeley, education

#### **1. THE UNDERGRADUATE YEARS**

Jim was an undergraduate at Berkeley from 1961 to 1966. He had a double major in Mathematics and Engineering, and was elected to Phi Beta Kappa.

I joined the Berkeley faculty in 1963. I brought with me the manuscript of a book I had written while teaching at Michigan as a graduate student. The manuscript was mostly finished but I wanted to debug it thoroughly. During my first year at Berkeley, I taught a seminar on the contents of the book. This gave me a chance to meet Berkeley students. I had an outstanding group of students. Jim Gray was in the class as an undergraduate. He asked probing questions and we became good friends. Jim was a star in the course, even though there were fine graduate students also. He more than held his own with some of the best students in Math, CS, and EE.

Jim would drop by my office every day. He was always finding a new result or talking about research. We wrote our first paper together when Jim was still an undergraduate [1].

Jim was a voracious reader. He proofread books and papers other than mine and sent significant comments to the authors.

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Jim Gray Tribute, May 31, 2008, Berkeley, CA, USA.

# 2. THE GRADUATE YEARS

Around this time, a Computer Science Department was formed at Berkeley, drawing from both Mathematics and Engineering. Jim spent his graduate years in that Department, which I had also joined, along with other faculty and students working in computer science. We enjoyed a very productive research collaboration.

In addition to the work that led to his dissertation, Jim and I collaborated with other graduate students on a variety of research topics that led to conference and journal publications[2][3]. Some of the problems were raised in small graduate seminars; others stemmed from hallway conversations in what was a small, highly collaborative department. Much of our research had to do with automata theory, which was then an important topic in the foundations of computer science, as well as in engineering.

Jim's dissertation research had to do with context-free grammars and formal language theory[4][5][7][9]. It was an excellent piece of work and a strong contribution to the field.

Outside the classroom, Jim was a lively, warm and social person. He was always generous with his time in helping his colleagues.

It was always surprising to me that, for someone so smart, Jim was so poor at spelling. It turned out that in his formative years, he had been taught to spell phonetically. When we worked together, I had to correct spelling mistakes in everything he wrote. Fortunately, spell-checkers came along later and alleviated his difficulty.

# 3. THE POSTGRADUATE YEARS

Jim stayed at Berkeley as a postdoctoral fellow until 1971. During that period, he branched out intellectually, writing a paper on locking in operating systems [6], and on formal modeling [8].

Jim was always a good friend to those he knew. When I returned from sabbatical and needed a place to stay, Jim put me up in the small apartment he shared with his wife. Another of my students was Ivan Havel, with whom Jim was very close. After Ivan returned to Czechoslovakia in 1972, Jim brought him things that were otherwise unavailable there.

#### 4. Conclusion

Jim Gray's years at Berkeley gave him a great start on a wonderful career. Those of us who were his friends and colleagues will never forget him.

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