

Gerard Salton

March 8, 1927 — August 28, 1995

Gerard Salton, Professor of Computer Science, died of cancer on August 28, 1995. Gerry was the preeminent researcher and leader in the field of information retrieval—almost from the time he started working in it in the early 1960s until his death 35 years later. Today, dozens of well-known commercial systems, including some “search engines” on the world wide web, use ideas developed in his work. Gerry was the first recipient of the award for research given by the ACM Special Interest Group for Information Retrieval (1983), and upon his death, the award was named the “Gerard Salton Award for Distinguished Contribution to Information Retrieval Research”.

We share the grief of his passing, as well as all the fond memories of him, with his wife, Mary Birnbaum Salton; younger brother, Jean Sahlmann; daughter, Mariann Salton Thompson and her husband; son, Peter and his wife; and three grandchildren.

Gerry was born in Nürnberg, Germany, on March 8, 1927, the son of Rudolf and Elisabeth Sahlmann. He spent his youth in Germany. During World War II, however, he and his parents had to flee Germany. Later, at one point, he and his brother Jean were spirited across a border in the middle of the night, taking care to elude German guards.

Gerry came to the United States in 1947, changing his name from Sahlmann to Salton, and became a citizen in 1952. In 1950, he married Mary, his wife of 45 years. He attended Brooklyn College, receiving a Bachelor’s degree in mathematics in 1950 and a Master’s degree in 1952.

Gerry entered the Ph.D. program in Applied Mathematics at Harvard, receiving his Ph.D. degree in 1958. He was the last of Howard Aiken’s Ph.D. students, and also one of the first programmers of Harvard’s Mark IV computer. He stayed on as Instructor (1958-60) and Assistant Professor (1960-65). Gerry was extremely fond of Harvard, and he often prefaced remarks with, “When I was at Harvard ...”.

In 1965, Gerry moved to Cornell to help create the Computer Science Department—along with Richard Conway, Juris Hartmanis, and a few others. He served as Chair of the Department from 1972-78 and was active in the Department until his death.

Gerry’s real professional love was not the Department but his research in information retrieval, which he had started while at Harvard. This research, including working with students, was all-important. To him, a good Department Chair was one who kept the administration away from the rest of the faculty, giving them a chance to

do their research and teaching—most administrative problems would go away by themselves, if you just let them alone. And to some extent, he practiced that philosophy very effectively while Chair of the Department.

While at Harvard, Gerry conceived of and began implementing SMART, an experimental computer System for the Manipulation and Retrieval of Text. He persisted with this work, despite discouraging comments about its relevancy and applicability from many people. But Gerry was right, and today, the concepts and techniques developed in SMART by Gerry, his students, and his colleagues elsewhere are found in dozens of well-known commercial systems on the Internet.

Gerry demanded the highest scholarship from himself and his students. It has been said that he was more responsible than anyone else for the development of a sound experimental tradition in his field. He was a prolific writer—the excellence of his 150-plus research articles and six texts on information retrieval make him the most cited person in information retrieval. His writing was indeed excellent—worth a Best JASIS Paper Award, a Best Information Science Book Award, and even an award for the best review in *ACM Computing Reviews*. He was a Guggenheim Fellow; he was selected as an ACM Fellow; and he received an Alexander von Humboldt Senior Scientist Award (Germany) and the ASIS Award of Merit.

In the midst of his research and writing, Gerry found time to be of service to his field. He was editor-in-chief of several journals at various times and on the editorial board of several others. He was on the Council of the ACM, was a member of the ASIS Board of Directors, and chaired Section T of the AAAS. He was founder and first chair of ACM's Special Interest Group in Information Retrieval.

Gerry was professionally literate across a variety of subjects, from linguistics to European literature. He could express himself like a professor of English; yet, he created a highly technical subject that depended heavily on computers and mathematics. Classical music was also important to him, and he and Mary rarely missed a Cornell concert. For years, he was a member of the Cornell University Faculty Committee on Music. A series of four Brahms concerts was dedicated to his memory and to Mary, and a plaque is being installed on the back of his favorite seat in Barnes Hall.

Gerry did not believe in “bigger is better”, and he did not like change for the sake of change. Talk of increasing the size of the Department would evoke the retort that it was better when it was smaller, as would talk of growth at Cornell and in Ithaca over the years. When the Department constructed two new floors in Upson Hall in the 1980s, Gerry said of his bigger and better office, “It’s nice, but I don’t like it—it’s *different*.”

Gerry loved his family, and took the time to be with Mary, Mariann, and Peter. Exercise and the outdoors were a source of joy for him. He sailed, swam, ice-skated, and hiked. He was a strong supporter of Cornell hockey. He skied regularly, both downhill and cross-country, in Ithaca and in Aspen, Colorado, where he and Mary had a condominium.

Richard Conway, Juris Hartmanis, David Gries