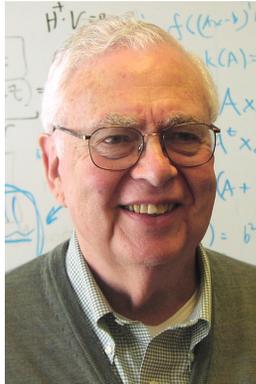


Special Volume

Dedicated to Gene Golub on the occasion of his 75th birthday

Welcome to a special volume of ETNA in honor of the 75th birthday of Gene Golub, which fell at the stroke of midnight between February 28 and March 1, 2007.



Everyone in the field of matrix computations has been affected by Gene, who has been famous since the 1960s for his contributions to many subjects. During his prolific career he has worked on least-squares and total least-squares, the singular value decomposition, quadrature, fast Poisson solvers, matrix iterations, preconditioners, factorizations, moment problems, Google-type matrices, and numerous other topics. Gene's contributions to the profession of numerical analysis and applied mathematics have been equally outsized, including being one of the founders of NA-Net, NA Digest, the quadrennial ICIAM Congresses, the Fox Prize, and two highly successful SIAM journals. He has about 30 PhD students and 80 academic grandchildren. And then there is the book *Matrix Computations* by Golub and Van Loan, with its fourth edition in preparation, which has defined the scope of modern numerical linear algebra. A citation index lists about 16,000 citations to this extraordinary book.

Once you start looking at his citations, it is hard to stop. Besides the book, we find that Gene has around 20 other papers with 100 or more citations, and 100 papers with 20 or more citations! His next hundred papers after that each have between 6 and 20 citations; and on and on it goes. Even counting coauthors is not easy with Gene, but the number seems to be approximately 230, ranging from Alter, Anderssen, Andersson, Arbenz, and Atkins to Zenios, Zha, and Zhang!

Gene has touched us all, whether personally or professionally, and we are happy to commemorate this occasion with a special set of papers.

Martin Gutknecht, Michael Overton, Lothar Reichel, Daniel B. Szyld, Nick Trefethen, Paul Van Dooren, and Andy Wathen
Special Volume editors

Addendum. Gene Golub died on November 16, 2007. At that time this volume had already six papers published electronically. Papers published afterwards have a different dedication. Possibly no one else has contributed more to numerical linear algebra than Gene Golub. The mathematics community has lost an extraordinary scientist and we have lost a good friend.