

Mechanical Engineering Academy of Distinguished Alumni

## J. Wesley Barnes, Ph.D., P.E. Mechanical Engineering Hall of Fame, 2006

BSME, The University of Texas at Austin, 1967 MSIE, University of Arkansas at Fayetteville, 1969 Ph.D., ORIE, The University of Texas at Austin, 1971

Cullen Trust for Higher Education Endowed Professor in Engineering No. 6 - Emeritus The University of Texas at Austin

From the earliest times of his life, Wes Barnes has striven for and achieved excellence in all of his activities. He was selected for the 1962 eleven-player Texas All-State High School football team and was subsequently admitted to The University of Texas in the Fall of 1963 with a full athletic scholarship in football. Wes was the first All-State football player from Corpus Christi Mary Carroll High School and the first member of his family to attend college. He completed his BSME in 4 years. Wes is a UT Football Letterman and was awarded the Travis County Ex-Students Association 1966 Scholarship Award for achieving the highest scholastic average among senior football players for that year.

Wes then began graduate school at the University of Arkansas at Fayetteville in the Fall of 1967, where he completed both his MS in Industrial Engineering and Ph.D. in Operations Research and Industrial Engineering in less than 3 years, at the age of 25.

Following his graduate studies, Wes joined Bell Telephone Laboratories on July 3, 1970 as a member of the technical staff. After a very successful period with Bell Labs, Wes joined the faculty of The University of Texas at Austin in the Department of Mechanical Engineering in September 1974. He served as the ORIE Area Coordinator for a total of 14 years.

Wes and Paul Jensen won the 1981 Institute of Industrial Engineering Book of the Year Award for their book *Network Flow Programming*, which was translated into the Russian language in 1984 for use in Russia's higher institutes of education. Wes's 1994 text, Statistical Analysis for Engineers and Scientists, has been translated into the Chinese language for use at both the undergraduate and graduate levels. Prior to his retirement, Wes was known as an excellent classroom

teacher who truly cared about the students in his classes both at UT and in the over 50 short courses offered to private companies.

The author of over 100 books, papers and reports, Wes's final research interest was in the arenas of methods of direct search techniques for the optimization of extremely large practical problems and in the application of those techniques to diverse practical problem arenas including species conservation, optimal groundwater aquifer management, massive reverse engineering problems in heat transfer, and military logistics problems. Wes is an internationally-recognized authority in the direct search arena. He supervised to completion more than 20 Ph.D. students and more than 40 MS students.

As a reflection of his many contributions to the profession at national and international levels and to The University of Texas at Austin, particularly to the graduate program in Operations Research and Industrial Engineering and the Department of Mechanical Engineering, Wes Barnes was named to the UT Department of Mechanical Engineering Academy of Distinguished Alumni Hall of Fame in 2006.

Wes was the director of a research consortium joining The University of Texas, The Air Force Institute of Technology and the USAF Air Mobility Command from 1999 to 2008, which brought \$1.7M in research funding for students and colleagues to UT Austin. In 2011, Wes and his co-authors won the Military Operations Research Journal Best Paper Award. Wes held the Cullen Trust for Higher Education Endowed Professorship in Engineering No. 6 from 1991 until his retirement in 2013.