

In Memoriam: Enders Anthony Robinson

Professor Enders Anthony Robinson, Ph.D., passed away in his sleep at the age of 92 on 6 December 2022. He was regarded as the “father of digital geophysics,” and his deconvolution methods have advanced a wide range of signal processing applications.

Robinson studied the work of Norbert Wiener as a graduate student at the Massachusetts Institute of Technology (MIT), finding applications for the Wiener filter, a once-classified process of predicting targets used during World War II. He gained international prominence after he established and directed the MIT Geophysical Analysis Group in 1952, revolutionizing exploration geophysics. His methods were demonstrated when he programmed MIT’s Whirlwind computer to deconvolve a seismic trace, after he arduously deconvolved 32 traces by hand.



Prof. Enders Anthony Robinson.

Robinson programmed the world’s first stored-memory computer and successfully ran several hundred seismic trace deconvolutions. It took years before computer technology became viable to process the vast amount of seismic data using Robinson’s digital signal processing methods. In 1965, he cofounded

Digicon, Inc., an oil exploration consulting company that processed seismic records using advancements in solid-state transistorized computing. Robinson’s deconvolution methods have been applied to radar, speech analysis, economics, and many other areas of signal processing, transforming the field of electrical engineering.

Robinson was a member of the National Academy of Engineering, European Academy of Sciences, Society of Exploration Geophysics, and IEEE. He was the McMan Distinguished Professor of Geophysics at Tulsa University and a visiting professor at Cornell University and spent his sabbatical at Harvard University. Robinson held the Maurice Ewing and J. Lamar Worzel chair as professor emeritus of applied geophysics at Columbia University. Professor Robinson is survived by three children and seven grandchildren.

—Erik Robinson

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Digital Object Identifier 10.1109/MSP.2023.3254219
Date of current version: 1 May 2023

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electrical engineering and his Technical License and Ph.D. degrees in signal processing from the Royal Institute of Technology, Stockholm, Sweden, in 2007, 2011, and 2013, respectively. He is an associate professor at Uppsala University, 751 05 Uppsala, Sweden. His research interests include statistical signal processing, machine learning, causal inference, and localization.

Petre Stoica (ps@it.uu.se) is a professor in signals and systems modeling at Uppsala University, 751 05 Uppsala, Sweden. He is a member of the Royal Swedish Academy of Engineering Sciences, Stockholm, Sweden, an international member of the United States

National Academy of Engineering, Washington, D.C. USA, an honorary member of the Romanian Academy, Bucharest, Romania, a member of the European Academy of Sciences, Liege, Belgium, and a member of the Royal Society of Sciences, Uppsala, Sweden. He is also a fellow of the European Association for Signal Processing and the Royal Statistical Society, a distinguished fellow of the International Engineering and Technology Institute, and a Fellow of IEEE.

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