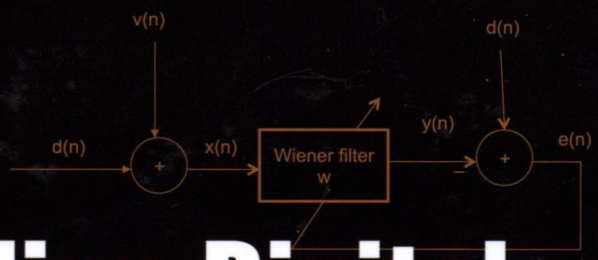

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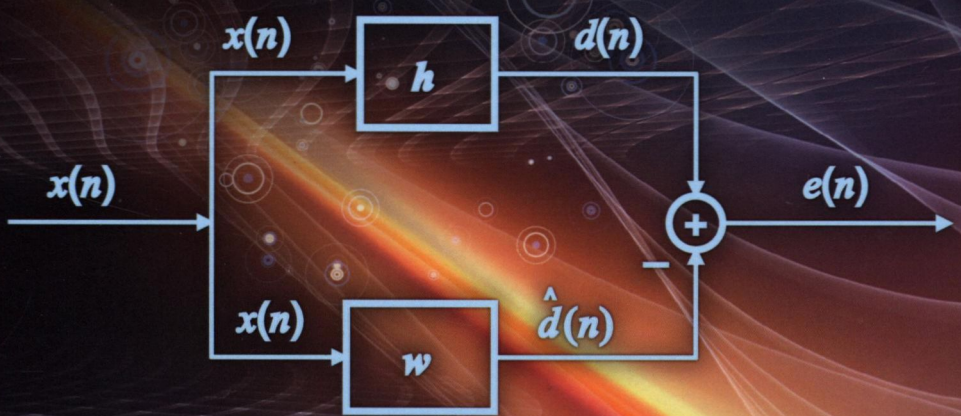

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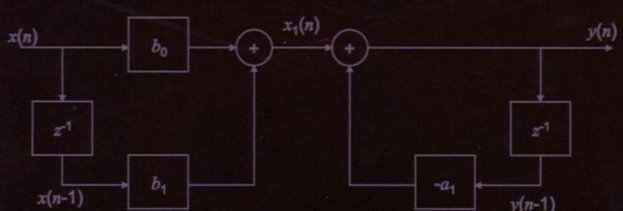

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Abbreviations

ACF	autocorrelation function
ACS	autorrelation sequence
AIC	Akaike information criterion
AR	autoregressive process, AR(p) of order p
ARMA	autoregressive moving average process, ARMA(p, q) of order (p, q)
ARMAX	autoregressive moving average with exogenous source
ARX	autoregressive moving average with exogenous input
BT	Blakman–Tukey
CDF	cumulative distribution function
CRLB	Cramer–Rao lower bound
DFT	discrete Fourier transform
DTFT	discrete-time Fourier transform
ENSS	error normalized step size
FFT	fast Fourier transform of data given by the vector x
FIR	finite impulse response of a discrete system
FPE	final prediction error
FT	Fourier transform
IDFT	inverse discrete Fourier transform
IDTFT	inverse discrete-time Fourier transform
IFFT	inverse fast Fourier transform
IFT	inverse Fourier transform
ID	identically distributed
IID	independent and identically distributed
IIR	infinite impulse response of a discrete system
KVL	Kirchhoff voltage law
LMF	least-mean forth
LMMN	least mean mixed norm
LMS	least mean square
LTI	linear time invariant
LS	least squares
LSE	least-squares error
MA	moving average process, MA(q)
MEM	maximum entropy method
MMSE	minimum mean square error
MSE	mean square error
MV	minimum variance
MVUE	minimum variance unbiased estimator
N(m, v)	Normal (Gaussian) distribution with mean m and variance v
NLMS	normalized LMS
PDF	probability density function
PNLMS	power normalized LMS
PSD	power spectral density
QAM	quadradure amplitude modulation
ROC	region of convergence
RV	random variable
RVs	random variables
RVSS	robust variable step-size (algorithm)

RW	random walk
SCLMS	self-correcting LMS
SCWF	self-correcting wiener filter
TDLMS	transform domain LMS
VSLMS	variable step-size LMS
WGN	white Gaussian noise
W–K	Wiener–Khintchine
WN	white noise
WSS	wide-sense stationary process
YW	Yule–Walker equations

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Author

Alexander D. Poularikas received his PhD from the University of Arkansas and was a professor at the University of Rhode Island. He became chairman of the Engineering Department at the University of Denver and then served as chairman of the Electrical and Computer Engineering Department at the University of Alabama in Huntsville. He has published, co-authored and edited 14 books. Dr. Poularikas served as editor-in-chief of the *Signal Processing Series* (1993–1997) with ARTECH HOUSE and is now editor-in-chief of the *Electrical Engineering and Applied Signal Processing Series* as well as the *Engineering and Science Primers Series* (1998–) with Taylor & Francis Group. He was a Fulbright scholar, is a life-long senior member of IEEE, and a member of Tau Beta Pi, Sigma Nu and Sigma Pi. In 1990 and 1996, he received the Outstanding Educators Award of the IEEE, Huntsville section.

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