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Group F: Information Engineering*CUED Library
Shelfmark*

4F1 - Control System Design [Prof MC Smith] Michaelmas		
DORF, R. C. & BISHOP, R. H	MODERN CONTROL SYSTEMS <u>Prentice Hall</u> 10 th edition 2005	QC.262
FRANKLIN, G. F., POWELL, J. D. & EMAMI-NAEINI, A.	FEEDBACK CONTROL OF DYNAMIC SYSTEMS <u>Prentice Hall</u> 5 th edition 2006	QC.261
DOYLE, J.C., FRANCIS, B. A. & TANNENBAUM, A.R.	FEEDBACK CONTROL THEORY <u>Macmillan</u> 1992	QC.210

4F2 - Robust and non –Linear Systems Control [Dr JM Gonçalves] Lent		
*BALAS, G.J. <i>et al.</i>	Mu-ANALYSIS AND SYNTHESIS TOOLBOX <u>MathWorks Inc</u> 1993	Library office reference copy only
GREEN, M. & LIMEBEER, D.J.N.	LINEAR ROBUST CONTROL <u>Prentice Hall</u> 1995	QC.228
MACIEJOWSKI, J.M.	MULTIVARIABLE FEEDBACK DESIGN <u>Addison-Wesley</u> 1989	QR.25
ZHOU, K., DOYLE J.C & GLOVER, K.	ROBUST AND OPTIMAL CONTROL <u>Prentice Hall</u> 1996	QC.234
ZHOU, K. & DOYLE, J.C.	ESSENTIALS OF ROBUST CONTROL <u>Prentice Hall</u> 1998	QC.259

4F3 - Optimal and Predictive Control [Prof K Glover]		
*ASTROM, K.J. & MURRAY, R.M.	FEEDBACK SYSTEMS: AN INTRODUCTION FOR SCIENTISTS AND ENGINEERS <u>Princeton University Press</u> 2008	QC.269
*BERTSEKAS, D.P.	DYNAMIC PROGRAMMING AND OPTIMAL CONTROL. Vol.1 <u>Athena Scientific</u> 3 rd edition 2005	QC.276
*MACIEJOWSKI, J.M.	PREDICTIVE CONTROL: WITH CONSTRAINTS <u>Prentice Hall</u> 2002	QC.254
*WHITTLE, P.	OPTIMAL CONTROL: BASICS AND BEYOND <u>Wiley</u> 1996	QC.235
CAMACHO, E. & BORDONS, C.	MODEL PREDICTIVE CONTROL <u>Springer</u> 2nd edition 2004	QC.264

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PART IIB BOOKLIST 2011/12

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GREEN, M. & LIMEBEER, D.J.N.	LINEAR ROBUST CONTROL <u>Prentice Hall</u> 1995	QC.228
MACIEJOWSKI, J.M.	MULTIVARIABLE FEEDBACK DESIGN <u>Addison-Wesley</u> 1989	QR.25
RAWLINGS, J. B. & MAYNE, D. Q.	MODEL PREDICTIVE CONTROL: THEORY AND DESIGN Nob Hill Publishing 2009	QC.273
ZHOU, K., DOYLE J.C & GLOVER, K.	ROBUST AND OPTIMAL CONTROL <u>Prentice Hall</u> 1996	QC.234
ZHOU, K. & DOYLE, J.C.	ESSENTIALS OF ROBUST CONTROL <u>Prentice Hall</u> 1998	QC.259
4F5 – Advanced Wireless Communications [Dr A. Guillén i Fabregas] <i>Lent</i>		
*MADHOW, U.	FUNDAMENTALS OF DIGITAL COMMUNICATION <u>Cambridge University Press</u> 2008	NO.324
*PROAKIS, J.G. & SALEHI, M.	DIGITAL COMMUNICATIONS <u>McGraw-Hill</u> 5 th edition 2008	NO.313
BIGLIERI, E.	CODING FOR WIRELESS CHANNELS <u>Springer</u> 2005	NO.322
COVER, T.M. & THOMAS, J.A.	ELEMENTS OF INFORMATION THEORY <u>Wiley</u> 2 nd edition 2006 Available as an ebook at: http://www.myilibrary.com?id=51749	NO.321
GALLAGER, R.G.	PRINCIPLES OF DIGITAL COMMUNICATION <u>Cambridge University Press</u> 2008	NO.320
MACKAY, D.J.C.	INFORMATION THEORY, INFERENCE AND LEARNING ALGORITHMS <u>Cambridge University Press</u> 2003 Available online at: http://www.inference.phy.cam.ac.uk/mackay/itila/book.html	NO.277
SKLAR, B.	DIGITAL COMMUNICATIONS: FUNDAMENTALS AND APPLICATIONS <u>Prentice Hall</u> 2 nd edition 2001	NO.312
TSE, D. & VISWANATH, P.	FUNDAMENTALS OF WIRELESS COMMUNICATION <u>Cambridge University Press</u> 2005 Available as ebook at: http://www.myilibrary.com?id=95190	NO.296

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4F6 - Signal Detection & Estimation [Prof WJ Fitzgerald] Michaelmas		
*ORUANAIDH, J. J. K. & FITZGERALD, W. J.	NUMERICAL BAYESIAN METHODS APPLIED TO SIGNAL PROCESSING <u>Springer</u> 1996	NOE.60
*TERRIEN, C.W	DISCRETE RANDOM SIGNALS AND STATISTICAL SIGNAL PROCESSING <u>Addison-Wesley</u> 1992	NOE.57
SCHARF, L.L.	STATISTICAL SIGNAL PROCESSING <u>Addison-Wesley</u> 1991	NOE.56

4F7 - Digital Filters & Spectrum Estimation [Dr SS Singh] Michaelmas		
*HAYKIN, S.,	ADAPTIVE FILTER THEORY <u>Prentice Hall</u> 3rd edition, 1996 4th ed 2002 NN 455	NN.430 (4th ed at NN 455)
*ROBERTS, R. A. & MULLIS, C. T.,	DIGITAL SIGNAL PROCESSING <u>Addison-Wesley</u> 1987	NOE.35
*TERRIEN, C. W.,	DISCRETE RANDOM SIGNALS AND STATISTICAL SIGNAL PROCESSING <u>Prentice Hall</u> 1992	NOE.57
HAYES, M.H.	STATISTICAL DIGITAL SIGNAL PROCESSING AND MODELING <u>Wiley</u> 1996	NOE.86

4F8 - Image Processing & Image Coding [Dr J Lasenby] Michaelmas		
*JAIN, A. K.,	FUNDAMENTALS OF DIGITAL IMAGE PROCESSING <u>Prentice Hall</u> 1989	NO.218
*GONZALEZ, R. C. & WOODS, R. E	DIGITAL IMAGE PROCESSING <u>Prentice Hall</u> 2 nd edition 2002	NO.306

4F10 - Statistical Pattern Processing [Dr MJF Gales] Michaelmas		
*BISHOP, C.M.	PATTERN RECOGNITION AND MACHINE LEARNING <u>Springer</u> 2006	NOF.77

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*DUDA R., HART P. & STORK D.	PATTERN CLASSIFICATION <u>Wiley</u> 2 nd edition 2000	NOF.64
*MACKAY, D.J.C.	INFORMATION THEORY, INFERENCE AND LEARNING ALGORITHMS <u>Cambridge University Press</u> 2003 (Available online at: http://www.inference.phy.cam.ac.uk/mackay/itila/book.html)	NO.277
4F11 – Speech & Language Processing [<i>Prof P Woodland</i>] <i>Lent</i>		
*HUANG, X., ACERO, A. & HON, H-W.	SPOKEN LANGUAGE PROCESSING: A GUIDE TO THEORY, ALGORITHM AND SYSTEM DEVELOPMENT <u>Prentice Hall</u> 2001	NOB.106
*JURAFSKY, D. & MARTIN, J.	SPEECH AND LANGUAGE PROCESSING: AN INTRODUCTION TO NATURAL LANGUAGE PROCESSING, COMPUTATIONAL LINGUISTICS, AND SPEECH RECOGNITION. <u>Prentice Hall</u> 2 nd edition 2009	NOF.112
4F12 –Computer Vision & Robotics [<i>Prof R Cipolla</i>] <i>Michaelmas</i>		
*CIPOLLA, R & GIBLIN, P.J.	VISUAL MOTION OF CURVES AND SURFACES <u>Cambridge University Press</u> 2000	NOF.60
*NALWA, V. S.,	A GUIDED TOUR OF COMPUTER VISION <u>Addison-Wesley</u> 1993	NO.219
HARTLEY, R. & ZISSERMAN, A.	MULTIPLE VIEW GEOMETRY <u>Cambridge University Press</u> 2 nd edition 2003	NOF.68
4F13 –Machine Learning [<i>Prof Z Ghahramani</i>] <i>Lent</i>		
*BISHOP, C.	PATTERN RECOGNITION AND MACHINE LEARNING <u>Springer</u> 2006	NOF.77