



Engineering Research at the University of South Alabama Systems Engineering



Dr. Robert Cloutier UFORXWLHU#VRXWKDODEDPD HGX
z 0RGHO EDVHG V\ VWHPV HQJLQHHULQJ
z 0RGHO EDVHG HQJLQHHULQJ
z 'LJLWDO 7KUHDG 'LJLWDO 7ZLQ
z 6\ VWHP \$UFKLWHFWXUH 3DWWHUQV
z 0HWDYHUVH IRU V\ VWHPV HQJLQHHULQJ
z *UDSKLFDO FRQFHSW RI RSHUDWLRQV &21236

Dr. Kari Lippert NOLSSHUW#VRXWKDODEDPD HGX
z 0HWDYHUVH IRU V\ VWHPV HQJLQHHULQJ
z 6\ VWHPV (QJLQHHULQJ

Dr. Bhushan Lohar EORKDU#VRXWKDODEDPD HGX
z 0RGHO EDVHG V\ VWHPV HQJLQHHULQJ
z 6SDFH V\ VWHPV HQJLQHHULQJ
z 0LVVLRQ HQJLQHHULQJ
z 3URGXFW OLQHDUHQJLQHHULQJ PRGHOLQJ
z &RQFHSW RI RSHUDWLRQDO FRQFHSWV
z 5HTXLUHPPHQWV HQJLQHHULQJ DQG PDQDJHPPHQW
z 5HTXLUHPPHQWV LQWHJUDWLRQ YHULILFDWLRQ YDOLGDWLRQ
z \$UWLILFLDODUHQJLQHHULQJ MZLQV

Dr. John Usher XVKHU#VRXWKDODEDPD HGX
z 6\ VWHPV VLPXODWLRQ PRGHOLQJ DQG DQDO\VLV
z 'HVLJQ DQG RYHUVLWJRGXFWLRQ V\ VWHPV
z \$SSOLFDWLRQ RI DUWLILFLDO LQWHJUDWLRQ OLJHQFH LQ PDQXIDDO

Engineering Research at the University of South Alabama

Civil, Coastal, and Environmental Engineering



Dr. John Cleary FOH DU \# VRXWKDODEDPD HGX

z 3RVW GLVDVWHU VWUXE QYHVDLH DWRD WLRQ DQG
z)RUHQDF O\VLV LQYHVWLJDWLRQ DQG HYDOXDWLRQ
z /DUJH DQG VPDOO VFDOH VWUXFWXUDO WHVWLQJ LQFOXGL
z &RQVWUXFWLRLRQ HYDOXDWLRQ DQG LQYHVWLJDWLRQ
z &RQFUHWH WHVWLRLRQ DQG HYDOXDWLRQ

Dr. Trung Do WUXQJGR#VRXWKDODEDPD HGX

z +XUULFDQH ZLQG ZDYH DQG VXUJH
z &RDVWDO DQG QHDU FRDVW VWUXFWXUHV
z &RPPXQLW\ UHVLOLHQFH DQG UHFR zFWXUHV VP



Engineering Research at the University of South Alabama

Electrical and Computer Engineering



Dr. Yousef El-Sharkh \HO VKDUN#VRXWKDODEDPD HGX

z 6PDUW JULG
z 'LVWULJHXWHUQWLRQ
z 5HQHZDECGH DOWHUQDYLWVHPVQDQJ\YLUWXDO SRZHU SODQWV
z ,QWHJUDWLRQ ZLWKPZDEVDHVLG
z 3KDVRU PHDVXUHPHQW XQLWV DQG ZLGH DUHD PRQLWRULQ
z 0XOWL DJHQW V\WHPV DQG GLWULEXWLYH FRQWURO
z (QHUJ\ VWRUDJH V\WHPV
z 3RZHU V\WHP SODQQLRZHDQTXEEDQWURDQG SRZHU HOHFWRU
z \$UWLILFLDO LQWHOOLJHQFRQWUFXHQWLRSRZHU V\W

Dr. Na Gong QDJRQJ#VRXWKDODEDPD HGX

z \$UWLILFLDO \$QWMDKQRQH\
z ,QWHOOLJHQWFRQWUFXHQWLRSRZHU V\WHPV
z 9LHZHU DZDUHVRHEH
z Ä%P2z

William B. Burnsed Jr. Department of Mechanical, Aerospace and Biomedical Engineering



Dr. Lanier S. Cauley OFDXOH\#VRXWKDODEDPD HGX
z 7KHUPRG\QDPLFV

Dr. Melike Dizbay-Onat PRQDW#VRXWKDODEDPD HGX
z 1DWXUDO ILDFWGYHJMMBGF DUERQV
z 3K\VLFDQ DQG FKHPLFDQ DFWLYDWLRQ PHWKRGV
z 3K\VLFDQ DGVRUSWLRQ
z 3RURXV PDWHULDOV
z %LR EDVHG FRPSRVLWHV
z (QJLQHHULQJ HGXFDWLRQ
z 67(0 RXWUHDFK

Dr. Kuang-Ting Hsiao NWKVLDR#VRXWKDODEDPD HGX
z 'SULQWLQJ RI SRO\PHU FRPSRVLWHV
z &DUERQ ILEHU UHLQIRUFHG SRO\PHU &)53 FRPSRVLWHV
z &DUERQ QDQRKUEHDFG &)53 =7 &)53 PXOWL VFDQHG FRPSRVLWHV
z \$UWLILFLDO LQWHOOLJHQFH LQ DGYDQFHG PDQXIDFWXULQJ
z 9RLG DQG GHIFW FKDUFDWHUL]DWLRQ DQG PRGHOLQJ IRU
z 0LFUR QDQR IOXLGV DQG VXVSHQVLRQV LQ SRURXV PHGLD
z)XQFWLRQDQJ PDWHULDOV
z 5KHRORJ\ YLVFRXV IORZ (5 05 IOXLGV
z 7UDQVSRUW SKHQRPHQD LQ SRURXV PHGLD
z (QHUJ\ VWRUDJH DQG KDUYHVWLQJ

Dr. Julia Kar MNDU#VRXWKDODEDPD HGX
z 0HGLFDO LPDJLQJ PRGDOLWLHV VXFK DV 05, (&* DQG 6SHFWLRQ
z &OLQLFDO KHDUW IDLOXUH GHWHFWLRQ
z 0DJQHWLF UHVRQDQJ RI QDWXURLQJ SHKDVH 63\$00 SHUHXVLRQ
z GHYHORSPHQW

Dr. Carlos Montalvo FPRQWDOYR#VRXWKDODEDPD HGX
z \QDPLF VLPXODWLRQ FRXSODJH IFRPHV HGFH DWWL PDWLRQ
z ([SHULPHQWDO IOLJKW VSHUWRQDQJ HPSURXWRQ RRRXV DHUW
z)OLJKW G\QDPLFV FRQWURODQJ SODJH IFRPHV IFRPHV
z 5HFRQILJXUDEOH IFRPHV IFRPHV YHKLFOHV
z 5RFNHW DVFHQW G\QDPLFV DQG FRQUROV
z 7HWKHUHG DHURVSDJH GHYHORSPHQW

Dr. David A. Nelson GDQHOVRQ#VRXWKDODEDPD HGX
z +XPDQ WKHUPRUHJXODWLRQ DQG WKHUPRUHJXODWLRQ PRGHOLQJ
z %LRORJLFDQ HIIHFWV RI QRQ LRQL]LQJ UDGLDWLRQ
z 0HGLFDO GHYLFH GHVLJQ
z +HDW WUDQVIHU HQKDQFHPHQW

Dr. Anh-Vu Phan YSKDQ#VRXWKDODEDPD HGX
z 6\PPHWULF *DOHUNLQ ERXQGDD SODJH IFRPHV IFRPHV
z ZDYH GLIUDFWLRQ DQG PRYLQJ ERXQGDU\ SUREOHPV
z &RPSXWDWLRQDO ELRPHFKDQLFV

Continued...

