

List of Technical Reports: By Topic

Mouhamed Abdulla, B.Eng., M.Eng., Ph.D., P.Eng., MIEEEE, MACM

Modulation Techniques:

1. **M. Abdulla**, “Digital Telecommunications: A Practical Engineering Approach,” Technical Report: TR-2007-14, Dept. of Electrical and Computer Engineering, Concordia Univ., Montréal, Québec, Canada, pp. 1-74, Oct. 2007. (Prof. Yousef. R. Shayan)
2. **M. Abdulla**, “A Mobile Device with QPSK Signaling in a Flat Slow Rayleigh Fading Channel,” Technical Report: TR-2007-11, Dept. of Electrical and Computer Engineering, Concordia Univ., Montréal, Québec, Canada, pp. 1-40, Mar. 2007. (Prof. Yousef R. Shayan)
3. **M. Abdulla**, “Simulation of a Digital Communication System using PSK/QAM Modulation Schemes,” Technical Report: TR-2006-09, Dept. of Electrical and Computer Engineering, Concordia Univ., Montréal, Québec, Canada, pp. 1-35, Jun. 2006. (Prof. Ali Ghrayeb)

Error Control Coding:

4. **M. Abdulla**, “Simulation of (2,1,2) Systematic Convolutional Code using HD-VA,” Technical Report: TR-2007-13, Dept. of Electrical and Computer Engineering, Concordia Univ., Montréal, Québec, Canada, pp. 1-43, Apr. 2007. (Prof. Ali Ghrayeb)
5. **M. Abdulla**, “Simulation of (8,4) Systematic and (24,12) Golay Codes in AWGN Channel,” Technical Report: TR-2007-12, Dept. of Electrical and Computer Engineering, Concordia Univ., Montréal, Québec, Canada, pp. 1-43, Mar. 2007. (Prof. Ali Ghrayeb)
6. **M. Abdulla**, “History and Applications of ECC: Over 50-years of Research and Innovation,” Technical Report: TR-2007-10, Dept. of Electrical and Computer Engineering, Concordia Univ., Montréal, Québec, Canada, pp. 1-14, Jan. 2007. (Prof. Ali Ghrayeb)

Optimization/Control:

7. **M. Abdulla**, “Unconstrained and Constrained Optimization Techniques,” Technical Report: TR-2004-07, Dept. of Electrical and Computer Engineering, McGill Univ., Montréal, Québec, Canada, pp. 1-80, Dec. 2004. (Prof. Hannah Michalska)
8. **M. Abdulla**, “Design of a Satellite Attitude Control System,” Technical Report: TR-2004-06, Dept. of Electrical and Computer Engineering, Concordia Univ., Montréal, Québec, Canada, pp. 1-59, Dec. 2004. (Prof. Khashayar Khorasani)

Digital Signal Processing:

9. **M. Abdulla**, "Simulation of a Frequency Division Multiplexer," Technical Report: TR-2003-05, Dept. of Electrical and Computer Engineering, Concordia Univ., Montréal, Québec, Canada, pp. 1-34, Mar. 2003. (Prof. Wei-Ping Zhu)
10. **M. Abdulla**, "Interpretation of the Discrete Hartley Transform using Algebraic Integers Scheme," Technical Report: TR-2001-03, Dept. of Electrical and Computer Engineering, Concordia Univ., Montréal, Québec, Canada, pp. 1-24, Dec. 2001. (Prof. William Lynch)

Aerospace Engineering:

11. **M. Abdulla**, X. Jia, E. Torres, B. Tudor, and T. Xu, "Preliminary Design for the Bell Helicopter Textron M-412 Composite Tailboom," Technical Report: TR-2005-08, École Polytechnique and Bell Helicopter Textron, Montréal, Québec, Canada, pp. 1-164, Apr. 2005. (Academic-Industry Partnership)

VLSI Systems:

12. **M. Abdulla**, "Fabrication of Different Size Transistors on a Si Wafer using CMOS Technology," Technical Report: TR-2002-04, Dept. of Electrical and Computer Engineering, Concordia Univ., Montréal, Québec, Canada, pp. 1-50, Apr. 2002. (Radu M. Marinescu, M.Eng. - Manager at PerkinElmer)
13. **M. Abdulla**, "Hardware Design of a Multiplexer using CMOS Pass-Transistor Logic Technology," Technical Report: TR-2001-01, Dept. of Electrical and Computer Engineering, Concordia Univ., Montréal, Québec, Canada, pp. 1-52, Apr. 2001. (Prof. Chunyan Wang)

Power Electronics:

14. **M. Abdulla**, "Analysis of a SVPWM Scheme for a Three-Leg VSI using FPGA Technology," Technical Report: TR-2001-02, Dept. of Electrical and Computer Engineering, Concordia Univ., Montréal, Québec, Canada, pp. 1-104, May. 2001. (Prof. Geza Joos and Dr. Su Chen)