Behzad M. Dogahe

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Objective

To find a full-time job/internship as an Electrical Engineer in the fields related to Communication Systems, Computer Networks, Signal and Image Processing, DSP Processors, Digital Circuit Design (FPGA/VHDL).

Education

–Doctor of Philosophy, Electrical Engineering, December 2007
University of Miami, Coral Gables, FL. GPA: 3.86/4.0
–Master of Science, Electrical Engineering, December 2004
Villanova University, Villanova, PA. GPA: 3.97/4.0
Thesis: Applications of Linear Time-Frequency Signal Representations to Watermarking and Over the Horizon Radar.
–Bachelor of Science, Electrical Engineering, June 2002
Sharif University of Technology, Tehran. GPA: 16/20
Thesis: Simulation and Implementation of RSA Cryptography System on FPGA.

Experience

University of Miami — Graduate Research Assistant
Coral Gables, FL — January 2005 – Present

Skills/Projects:
–Knowledge of Information Theory, Probability and Stochastic Processes, Communication Networks and Protocols and Cross-Layer Design, Wireless and Mobile Protocols, Optimization, Digital Control Systems.
–Simulation of the performance of TCP Reno/Vegas using NS-2 (Network Simulator).

Center for Advanced Communications at Villanova University — Graduate Research Assistant
Villanova, PA — August 2002 – December 2004

Skills/Projects:
–Knowledge of Digital Communications and Coding, Digital Signal Processing, Programming DSP Processors.
–Adaptive Filters, Image Processing Algorithms, Watermarking and Data Hiding.
–Design and implementation of Echo Canceller and IIR Filter using TI Code Composer Studio on TM320C54 DSP.
–Design of a New Watermarking Scheme Using Image Segmentation and Time-Frequency Analysis.

Electronic Research Center at Sharif University of Technology — Research Assistant
Tehran — September 2000 – May 2002

Skills/Projects:
–Knowledge of Logic Circuit Design (Combinaional/Sequestial Systems), Hardware Design

using CAD Tools, Microprocessors and their Assembly Language.
–Optimization and implementation of RSA cryptography system on FPGA.
–Design and implementation of DDS (Direct Digital Synthesis) signal generator capable of generating sine, square, and triangle waveform output using Altera FPGA and microcontroller.
–Implementation of various halftoning methods.
–Design and implementation of a digital metronome using 89C51 microcontroller.
–Preparing an interactive software package for simulation of PCM coding system as a kit for educational purposes.
–Design of a telephone touch-tone recognition system.

Micromodje Industries — Hardware Designer
Tehran — October 2000 – April 2001

Micromodje Industries — Industrial Trainee
Karaj — Summer of 2000

Skills/Projects:
–Experience with measurement instruments like logic analyzers, oscilloscopes, digital volt meters, signal generator, spectrum analyzer.

Publications

–B. Mobasseri,Y. Zhang, B. M. Dogahe, and M. G. Amin, "Designing robust watermarks using polynomial phase exponentials", *IEEE International Conference on Acoustics, Speech, and Signal Processing, Philadelphia, PA, March 2005.*
–Y. Zhang, B. M. Dogahe, M. G. Amin, and B. Mobasseri, "Digital watermarking with two-dimensional chirps", *SPIE Annual Conference, Denver, CO, August 2004.*
–Y. Zhang, M. G. Amin, B. M. Dogahe, and G. J. Frazer, "Time-frequency analysis for maneuvering target detection in over-the-horizon radars", *International Symposium on Signal Processing and its Applications, Paris, France, July 2003.*
–Technical Report, "Classification and Discrimination of Sources with Time-Varying Frequency and Spatial Spectra", *October 2003.*
–B. M. Dogahe, A. Alavi, and A. M. Pezeshk, "Simulation and Implementation of RSA Cryptography System (on FPGA)", *The First Iranian Conference of Cryptography, Tehran, October 2001.*

Honors

–Granted Research Assistantship for Graduate Studies at the University of Miami.
–Granted Research Assistantship for Graduate Studies at Villanova University.
–Ranked 2^{nd} and Awarded Silver Medal in the National Physics Olympiad.
–Ranked 20^{th} among more than 300,000 Participants in the Nationwide University Entrance Exam for Bachelor Degree.

Computer Skills

Programming Languages: C, C++, Pascal, Delphi, TCL, Assembly.
Software Packages: MATLAB, SPICE, PROTEL, ORCAD, Microsoft Office, AUTOCAD.
VHDL/FPGA Tools: ModelSim, Leonardo Spectrum, MaxPlusII.
DSP Tools: Texas Instruments Code Composer Studio.
NS-2 (Network Simulator), LaTeX.

Operating Systems: Windows, Unix/Linux.