

N. Etemadi

Research Assistant - George Mason University

Fairfax, VA

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Willing to relocate: Anywhere

Authorized to work in the US for any employer

WORK EXPERIENCE

Research Assistant

George Mason University - Fairfax, VA - August 2011 to Present

Statistical methods for "Network Tomography" analysis in transportation and data networks including:

- o Network traffic modeling

- o Traffic rate estimation using:

- * Bayesian analysis, Monte Carlo Markov Chain

- * Maximum likelihood estimators, Expectation-Maximization algorithm

- * Maximum Entropy methods

- * Time-series Analysis

- o Network delay analysis using hidden bivariate Markov models.

- Study of the trace fitting algorithms for Markovian arrival processes.

- Bivariate Markov chain parameter estimation using:

- o Expectation-maximization algorithm

- o Recursive casual parameter estimation algorithm

GMU - September 2013 to March 2015

Introduction to random processes, GMU, Spring 2015.

- Communication and Information Theory, GMU, Spring 2014-Spring 2015.

- Computer Network Architectures and Protocols, GMU, Fall 2013.

- MATLAB Programming, Amirkabir University of Technology. Fall 2008 - Fall 2010.

- Probability and Statistics, SUT, Fall 2009.

- Electrical Circuits, SUT, Spring 2010.

Selected Courses:

- Wireless Networks

- Advanced Communication Systems

- High Speed Networks

- Detection and Estimation Theory

- Time Series Analysis and Forecasting

- Numerical methods in optimization

- Information Theory

Researcher, R&D Department of Toos

Fuse Co - December 2010 to June 2011

Metering Equipment, Automatic Meter Reading, Advanced Meter Infrastructure, Smart Grid.

Research Assistant

Sharif University of Technology - September 2009 to October 2010

Study of MAC, routing protocols and throughput analysis in vehicular ad-hoc networks (VANET).

- Study of channel Estimation Methods in OFDM systems such as blind methods.
- Modeling and simulation of networks using queueing theory concepts.
- Study and implementation of direct sequence spread spectrum communication using MATLAB.

Student Assistant

Amirkabir University of Technology - June 2008 to September 2008

Design and simulation of 6-pin phase shifters with minimum dimensions.

EDUCATION**MS in Electrical and Computer Engineering**

Sharif University of Technology

October 2010

BS in Electrical and Computer Engineering

Amirkabir University of Technology (Polytechnic)

August 2008

PhD in Electrical and Computer Engineering

George Mason University - Fairfax, VA

ADDITIONAL INFORMATION**Skills:**

- Electrical Engineering software: MATLAB, Python, Pspice, R, FPGA, HFSS, Protel, Wireshark.
- OS & Application packages: Windows, Linux, Microsoft Office, LATEX.
- Statistics: Regression models, MCMC methods, Time series analysis, Hidden Markov models, Machine learning algorithm.
- Digital Signal Processing: Advanced DSP algorithms including digital modulation, adaptive filters, FIR, FFT, sampling,
- High-level Programming Languages: C++, Pascal, Visual Basic.