Saman Barghi

School of Computer Science University of Waterloo Waterloo, ON, Canada Phone: +1-(519) 885-1211 ext: 35368 Email: sbarghi@cs.uwaterloo.ca http://cs.uwaterloo.ca/ \sim sbarghi/

Education

University of Waterloo Waterloo, ON, Canada PhD in Computer Science 2009-Present

Concordia University Montreal, QC, Canada $Master\ of\ Computer\ Science$

GPA: 3.98

2007-2009

Sharif University of Technology

Bachelor of Science in Computer Science 2002-2006

Tehran, Iran *GPA*: 3.58

Research Interests

- Vehicular Ad hoc Networks
- Wireless Networks
- Network Security
- Overlay and Peer-to-Peer Networks
- Computer Networks

Research Experience

University of Waterloo

School of Computer Science
Supervised by Dr. Pin-Han Ho
Research field:

• Computer Networks

Concordia University

Computer Science Department Supervised by *Dr. Chadi assi* Research field:

- Vehicular Ad hoc Networks
- Network Security

DML (Digital Media Lab)

Computer Engineering Department, Sharif University of Technology Supervised by *Dr. H. R. Rabiee* Research field:

- Overlay/P2P Networks
- Large-scale Application Layer Multicast networks

Research Assistant

 $Research\ Assistant$

Research Assistant

March 2005 - 2007

2007 - 2009

2009 - present

• Large-scale Applica

- Khoder Shamy, Saman Barghi, Chadi Assi: Efficient rate adaptation with QoS support in wireless networks. Ad Hoc Networks 8(1): 119-133 (2010)
- S. Barghi, C. Assi, A. Besnlimane, "Connecting Vehicular Networks to the Internet: A Life Time-based Routing Protocol", submitted to 10th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks
- A. Abdolhosseini Moghadam, S. Barghi, H. R. Rabiee, M. Ghanbari, "A new scheme on recovery from failure in NICE overlay protocol", International Workshop on Peer-to-Peer Information Management, May 29, 2006, Hong Kong. (Link)

Publications

• N. Amini, S. Barghi, "A Reliable Way for Implementing Farsi Spell Checker", "Jahad Daneshgahi Iran (JDIOC)", 21-23 September-2004, Tehran, Iran.

Awards

- David R. Cheriton Award (2009-2011)
- Concordia University Tutiton fee remission Award (Summer 2007- Winter 2008)

Teaching Experience

Computer Networks and Protocols

Teacing Assistant Computer Science Department, Concordia

University

Open Source Concepts (Linux, Perl,

Apache, MySQL, PHP)

APTECH Summer 2006

(http://www.aptech-worldwide.com/)

Signals and Systems Teaching Assistant

Department of Computer Engineering, Sharif Fall 2005

University of Technology

Java and OOP Programming Teaching Assistant Spring 2005

Department of Computer Engineering, Sharif

University of Technology

Teaching Assistant Computer Networks

Department of Computer Engineering, Sharif

University of Technology

Professional Experience

ParsOnline

http://parsonline.net/

Web developer

Fall 2008

Instructor

Fall 2004

June 2003-August 2003

- Designed and implemented a traffic shaper panel
- Implementing Network gate keeper
- Online Store for selling ParsOnline cards using PHP and web services

AICTC (Advanced Information and Communication Technology Center)

Web Developer, Mail Server and Linux Administrator

http://www.aictc.com/

August 2002 - August 2006

- Web Developer
- Working on Installing and Maintaining Mail Servers such as Sendmail, Qmail, Postfix
- Linux and Network Administrator

Voluntary Professional Activities

Computer Engineering Department

Sharif University of Technology Tehran, Iran

Webmaster Web and Mail server maintenance Fall 2003 - 2007

Accomplished Academic Projects

- Optical Network Protocol implementation using C++ (Design & Analysis of Algorithms, Fall 2008)
 - Implemented an optimization algorithm to be used in Optical Networks
 - Used Dikjestra and Max-Min heaps for the implementation
- Network Manager (Network Management course, Winter 2007)
- Secure Email Protocol (Network Security Course, Spring 2006)
 - Implemented a secure protocol for transmitting email messages securely
 - The protocol supported Confidentiality, Integrity and Authentication and no denial and also supported Certificates
- HTTP Server using C++ (Computer Networks Course, Spring 2005)
 - Support HTTP/1.1 Standards
 - Platform Independent
- Designing and Implementing a Spell checker using C++ (C++ Course, Fall 2003)
 - Having the ability to find mistakes and give word suggestions
 - Using Soundex, Metaphone and Double Metaphone Algorithms

Professional Skills

- Programming Languages : C, C++, C#, Java, VC++, Scripting languages (Perl, Unix Shell Scripts)
- Software : Network simulator tools (Omnetpp, NS2, Opnet), Signal Processing using MATLAB
- Web Skills: J2EE, PHP , HTML, XHTML, CSS, ASP, Javascript, VBscript, XML, XSLT, Web Services
- Operating Systems: Linux, BSD, Windows, DOS
- HDL Programming : VHDL, Verilog HDL
- Other Skills:
 - Linux Administration
 - Mail Server Administration (Postfix, Qmail, Sendmail)
 - Database Administration (MSSQL, MySQL, PostgreSQL)

Languages

- Persian (Native)
- English (Fluent)
- French (Fair)
- German (Basic).