

Omid Ardakanian

Department of Computer Engineering
Sharif University of Technology
Azadi Avenue, Tehran, Iran.
Date of Birth: August 16, 1987

Home: (+98) 21 88769440
Mobile: (+98) 912 2190552
Email: ardakanian@ce.sharif.edu
Homepage: <http://ce.sharif.edu/~ardakanian>

Education

B.Sc. Computer Engineering [2005 - 2009]

Sharif University of Technology, Tehran, Iran. (**GPA: 18.03/20, Last semester: 18.92/20**)

Major: Software Engineering

Thesis: Design and Implementation of a Framework for Simulation and Evaluation of Mobility Aware Distributed Topology Control Protocols in Mobile Ad-Hoc Networks

Relevant Courses:

Discrete Mathematics, Theory of Computation, Compilers, Operating System, Database Design, Artificial Intelligence, Modern Information Retrieval, System Analysis and Design, Software Engineering, Object Oriented Analysis and Design, Computer Networks, Discrete-Event System Simulation, Data & Network Security, Advanced Network Security(graduate course).

High School [2001 - 2005]

Diploma of Mathematics and Physics in Atomic Energy High School, Tehran, Iran. (**GPA: 20/20**)

Research Interests

Computer Networks

Network Security

Artificial Intelligence: Machine Learning

Software Engineering

Research Experience

Detecting Botnets by Detecting their Communication Channels, under supervision of Dr. M. Kharrazi, Sharif University of Technology, Fall 2008.

Mobility-Aware Framework for Topology Control in Wireless ad hoc Networks, under supervision of Dr. Hamid R. Rabiee, Digital Media Lab. Sharif University of Technology, Fall 2008

A Survey of Network Coding, under supervision of Mr. Malekian, Sharif University of Technology, Fall 2007.

Teaching And Work Experience

Teaching Assistant

Advanced Programming in Java, Mr. Hassas Yeganeh, Computer Engineering Department, Sharif University of Technology, Spring 2008.

Work Experience

Network administrator in the site of National UAV Design Contest(NUDC), Fall and Winter 2006.

Member of technical editing team of Operating System book, Sharif University of Technology, Fall 2008.

Projects

Design and Implementation of Bookshop Software

Small but well developed software that helps book keepers in categorizing and finding their books. This project was developed by using *UP* software development methodology together with Ali Reza Ghasemi.

Design and Implementation of RayaSam System

An integrated software for food delivery service with the following subsystems: accounting, packing & delivery, employment, ordering and management. This project was developed by using *SASD* software development methodology together with Ali Reza Ghasemi, Abbas Mehrabian, Marjan Ghazvininejad.

Design and Implementation of Niasan Web Application

Online food reservation service that was built using the J2EE technology together with Ali Reza Ghasemi.

Reverse Engineering Linux Device Driver

It was a project to understand and document parts of linux kernel that are responsible to deal with drivers and model these parts by using the object oriented approach. This was accomplished under supervision of Dr. Habibi and together with Soheil Hassas Yeganeh, Amin Fazli, Moslem Habibi.

Encipher

Secure communication system that performs encryption(using *AES*) and hashing(using *SHA1*) to ensure confidentiality and integrity of the sent messages. This was accomplished by using a protocol that needs session key and public key(extracted from *X.509* certificate). Together with Hossein Shahbazi, Hossein Mortazavi, Mehrdad Farajtabar.

Working on chess player agent

AI agent that used some heuristics to play chess, under supervision of Mr. Halavati and together with Amir Hossein Kadivar. This player was selected as one of the best in a competition that was held in Sharif University of Technology.

Comparing different Constraint Satisfaction algorithms in decoding Caesar cipher

under supervision of Mr. Halavati and together with Amir Hossein Kadivar.

Comparing different Informed Search algorithms in rotating dice problem

under supervision of Mr. Halavati and together with Amir Hossein Kadivar.

Working on the best backgammon player

Finding the best values for the parameters of backgammon player, using Local Search algorithms. Under supervision of Mr. Halavati and together with Amir Hossein Kadivar.

Implementation of Mini-Java compiler

Light compiler for Mini-java language that made the assembly code efficiently together with Ahmad Boorghany.

Combinational circuit simulator

Simple CAD tool that allows simulation of the combinational circuit and draws truth table.

Sound editor

A program that displays a sound wave graphically and allows applying sound effects like fading to it.

Honors & Awards

Offer of Admission for Graduate studies in Software Engineering from Sharif Brilliant Students Office, 2008.

Ranked in top 5 students in Cumulative GPA among 100 students of Computer Engineering Department of Sharif University of Technology, 2005-2008.

Granted the title of "Brilliant Student" from Sharif University of Technology because of excellent educational background, 2006.

Ranked 39th in Iran National Entrance Exam among more than 370,000 students who are taking this exam in order to enter universities, 2005.

Semifinalist in Iran National Olympiad in 2 majors: Mathematics and Computer, 2004.

Technical Skills

Programming languages: Assembly(Motorolla 68000), C++, Java, C#

Web Development: HTML, CSS, JavaScript, JSP

Database Management Systems: Microsoft SQL Server, MYSQL

Operating Systems: Linux, DOS, MS Windows

Typesetting: L^AT_EX, Microsoft Word

Familiar with OMNET++ Network simulator

Familiar with IDS(e.g. snort), Firewall(e.g. iptables), Scanner(e.g. nmap)

Language Skills

English

TOEFL IBT (October 2008): **103/120**

Reading (28/30), *Listening* (28/30), *Speaking* (22/30), *Writing* (25/30).

GRE General (October 2008)

Quantitative (800), *Verbal* (350), *Analytical Writing* (3.0).

Senior Proficiency certificate in English by Iran Language Institute(ILI), Summer 2005

Farsi

This is my mother tongue.