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Areas of interest

- Wireless Sensor Networks
- Ad-Hoc Wireless Networks
- Network Management and Security
- Artificial Intelligence

Education

Sep 2006 - Present University of Tehran, Tehran, Iran

Master of Information Technology, (Univ. of Tehran is among three most prestigious Universities in Iran)

- GPA 19.01/20 (3.80/4) – Top Student
- Thesis: “Sleep Scheduling in Wireless Sensor Networks”
- Advisor: Dr. Nasser Yazdani & Dr. Mehdi Dehghan
- Passed Courses:
 - Seminar (on Query Processing in Wireless Sensor Network)
 - Advanced Operating Systems
 - Intelligent Information retrieval
 - Electronic Commerce (Advanced Course)
 - Computer Networks (Advanced Course)
 - Information Technology Management
 - Database Design (Advanced Course)
 - Biological Computing
 - Ad-Hoc Networks

Sep 2002 – June 2006 Amirkabir University of Technology, Tehran, Iran
Bachelor of Information Technology Engineering, (Amirkabir Univ. of Tech. is among three most prestigious Universities in Iran)

- GPA: 16.2 /20 (3.24/4). (among top ten students)
- Last Year GPA: 17.75/20
- Two Last Years: 16.88/20
- Thesis: “Fraud Detection in Cellular Mobile Networks”
- Advisor: Dr. Mehdi Dehghan

Sep 1998 – June 2002 Farzan High School, Tehran, Iran
Diploma of Math and Physics

- GPA 19.63 from 20, Top Student.

Publications

- A. Yahyavi, "Designing a Cross Layer Protocol for Wireless Sensor Networks, A Case Study", ICTP's Workshop on Wireless ICT Solutions, The Abdus Salam International Centre for Theoretical Physics, Feb. - March 2009, Trieste, Italy. (Won Full Scholarship)
- H. Khalili, A. Yahyavi, Farhad Oroumchian, "Web Graph Pre-compression for similarity based algorithms", In Proceedings of Third International Conference on Modeling, Simulation, and Applied Optimization (ICMAO'09), Sharjah, UAE, 2009.
- A. Yahyavi, “Sleep Scheduling In Wireless Sensor Networks”, M.Sc. Thesis, University of Tehran, Tehran, Iran, 2008.
- A. Yahyavi, L. Roostapour, R. Aslanzade, M. Dehghan, N. Yazdani, "Intrusion k-coverage in wireless sensor Networks", In Proceedings of WinSYS2008 International Conference on Wireless Information Networks and Systems, Porto, Portugal, 2008, p41-46.
- A. Yahyavi, H. Khalili, N. Yazdani, "Delay Efficient MAC Protocol for Diffusion Based Routing in Wireless Sensor Networks", In Proceedings of WinSYS2008 International Conference on Wireless Information Networks and Systems, Porto, Portugal, 2008, p88-91.
- A. Yahyavi, L. Roostapour, R. Aslanzade, N. Yazdani, "Dykco, Dynamic k-Coverage in Wireless Sensor Networks", In Proceedings of 2008 IEEE

International Conference on Systems, Man, and Cybernetics, Suntec, Singapore, 2008, p2804-2809.

- S. Nazemi, A. Nasiri, L. Roostapour, A. Yahyavi, M. Dehghan, “SLTP: Scalable Lightweight Time Synchronization Protocol for Wireless Sensor Network,” Lecture Notes in Computer Science, vol. 4864, MSN2007, 2007, p. 536.
- A. Yahyavi, “Fraud Detection in Cellular Mobile Networks”, B.Sc. Thesis, Amirkabir University of Technology, Tehran, Iran, 2006.
- L. Roostapour, A. Yahyavi, “Shahid Beheshti DLN Center a Case Study”, ICTP Workshop on Web enabling technologies for e-Learning, 2005, Trieste, Italy. (Full Scholarship)
- A. Yahyavi, A. Ghoorchian, O. Mirabzadeh, “A Survey on eBanking”, Rayaneh Khabar Journal, 2005. [Persian]

Teaching

Fall 2008 Operating Systems Lab

Linux Kernel Architecture, Module Programming, ...

Spring 2008 Operating Systems Lab

Linux Kernel Architecture, Module Programming, ...

Academic Activities

Fall 2006 – Present Router Lab, University of Tehran

Sleep Scheduling in Wireless Sensor Networks

Under Dr. N. Yazdani & Dr. M. Dehghan’s Supervision

- Ongoing research.
- Currently working on Power Aware Real Time Protocols in Wireless Sensor Networks

Spring 2007 Database Lab, University of Tehran

Compression of the Inverted Index of Web Graph

Under Dr. F. Oroumchian’s Supervision

- Resulted in a Conference Paper in ICMSAO'09.

Spring 2007 Router Lab, University of Tehran

Query Optimization and aggregation in Wireless Sensor Networks

Under Dr. N. Yazdani & Dr. M. Dehghan's Supervision

- The Topic for my “Seminar course”.
- A research proposal to Iran Telecommunication Research Center.
- A detailed survey on Query/Multi-Query processing and aggregation methods in wireless sensor networks.

Fall 2006 University of Tehran

Research on BPR methodologies and a case study of a BPR project in University of Tehran Learning System.

Under Dr. F. Taghiyare Supervision

- Led to a presentation and an analysis document in Farsi.

March 2005 – September 2006 Amirkabir University of Technology

BS Thesis on Fraud Detection Methods in Cellular Mobile Networks

Under Dr. M. Dehghan Supervision

- Use of Elman and LSTM Recurrent Neural Networks in fraudulent usage recognition in cellular mobile networks.
- My BS Thesis.
- Didn't lead to a publication due to unavailability of reliable test data.

Spring 2006 Amirkabir University of Technology

Research on How to Use Multimedia in e-Learning (Content Production)

Under Dr. A. Kardan Supervision

- Led to a guideline document and a presentation in Farsi.

Fall 2005 Amirkabir University of Technology

Research on Decision Making Concepts regarding to Organizational Behavior

Under Dr. Barati Supervision

- Led to a presentation in Farsi.

Spring 2005 Amirkabir University of Technology

Research on Requirement engineering in software engineering specifically in Agile Software Development Methodologies.

Under Mr. A. Ajdari Supervision

- Led to a guideline document and a presentation in Farsi.

Spring 2005 Amirkabir University of Technology

Research on developing an online e-Court system based on complicated judgmental rules and regulations of Iran. Edalat Juridical Complex, Tehran, Iran.

Under Mr. S. M. Hosseininejad Supervision

- Led to a software engineering analysis document and a presentation in Farsi.

Selected Academic Projects

Fall 2007 E-Commerce (Advanced Course), UT

ASP.NET programmer

- Application design and development for a Electronic Store with inventory management
- Analysis of Business Strategies, Value Chain Models, Advertising, etc

Spring 2005 Information Technology 2 Course, AUT

Design a Management Information Base for SNMP (Pull Model).

- Creating a visual user interface by QT-Designer in FC3 for an SNMP MIB.

Fall 2005 Information Technology 1 Course, AUT

Design a CMS for Electronic Courts by using web-services

- Design and Prototype Implementation of a Case Management System for electronic courts by using PHP + NuSOAP.

Spring 2003 Advanced Programming Course, AUT

Design and Implementation of a Multiplayer Game (Age of Empires Prototype)

- Using C++ and Socket Programming

Work Experience

Sep 2005 - Dec 2005 Behbahan Cement Company Tehran, Iran.

ASP.Net Programmer

- Designing and Implementation of Behbahan cement Co. Web Site. (ASP.NET, Macromedia Flash, PhotoShop)

June 2005 - Aug2005 Chista Software Group, Tehran, Iran
Software Engineer & ASP.Net Programmer

- Design and Implementation of a prototype and RFP for Building Industry Information Center. (Rational Rose, Visio, ASP.NET)

Jan 2005 - March 2005 Oil Industries Engineering & Construction Co., Tehran, Iran
Software Project Manager & Developer

- Personnel Computer Request Management system of OEID (SSADM, C#, SQL Server, ASP.NET)

June 2004 - Sep 2004 MetaNet AmirKabir, Tehran, Iran
Software Analyzer & C++ Programmer

- Performance Comparison of UNIX Based Firewalls.

Honors and Awards

- Graduation as the first rank among IT graduate students (GPA: 19.01/20) (2008)
- Graduation among top 10 in BS degree (GPA: 16.2/20) (2006)
- Offered Admission to Amirkabir Univ. Of Tech. without national examination
- Ranked 540st in the university entrance examination among around 400,000 students (2002)
- 2001 Reached first level of National Math and Computer Olympiad (2001)

Memberships

- Alumni Association of Faculty of Engineering, University of Tehran (2008 – present)
- IEEE & IEEE Computer Society Student Member (2006-present)
- Alumni Association of Amirkabir University of Technology (2006-present)
- Student executive committee of 1st International information and knowledge Technology Conference, Amirkabir University of Technology 2005.
- Member of Amirkabir University of Technology contest, The 2003 ACM-ICPC World Regional Contest, Amirkabir University of Technology, Tehran, Iran, 2003

Qualifications

Language

- Farsi (Persian): Native
- TOEFL IBT Oct. 2008: 114/120 (Native). Reading:30/30, Listening: 30/30, Speaking: 24/30, Writing: 30/30
- IELTS 7.5/9: DEC. 2006; Reading: 9/9, Listening: 7/9, Writing: 7/9, Speaking: 7/9
- GRE Oct. 2008: Verbal: 520/800 (Percentile: 66%), Quantitative: 780/800 (Percentile: 90%), Analytical: 3.5/6.0 (Percentile: 20%)
- GRE Oct. 2007: Verbal: 350/800, Quantitative: 800/800, Analytical: 3.5/6.0
- French: Basic

Software Development

- Process Engineering, methodology tailoring, business software analyzing and designing using Power Designer, Microsoft Visio (SSADM).
- Experience in UML and RUP with Rational Rose suite.
- Some research on Agile Software Methodologies.
- Some research on requirement engineering in software development.

Windows Programming

- Proficient in C/C++, VC++ / Borland C++ Builder and C# professional programming.
- Fluent in Working with “Code Smith” and “Net Tiers”.
- Experience with Java programming

Linux Programming

- Kernel Architecture, Kernel Module Programming,
- Fluent in Linux shell programming.
- Fluent in X Programming with QT-Designer.
- Fluent in network programming.

Web Development

- Proficient in ASP.NET programming.
- Fluent in web design with PHP, JavaScript.
- Fluent in working with XML & Web Services. (NuSOAP & ASP.NET)

Database Design, Analysis and Management

- Fluent in SQL-Server DB Management
- Fluent in MySQL server DB Management.
- Experience in Oracle 9i/10g Server DB Management
- Experience in working with Oracle9i Designer, Power Designer, MySQL Front for Database design and management

Information Technology

- Familiar with Information Technology Concepts, e-Banking, e-Commerce, e-Learning, Multimedia, Value Chain Models, BPR.
- Familiar with Control Project, I.T. Strategic Planning, Organizational Behavior Management.
- Tools and Environments: MS Project, MS Office.

References

Will be furnished upon request.

Hobbies

- Music: Going to classical music concerts, trying to learn how to play guitar.
- Sport: **swimming**, chess, mountain climbing, and computer games.
- Reading: **technical news**, **history**, novels, and politics.
- Other hobbies: watching films and **business related tricks**.