

FARID BEHNIA

CONTACT INFO

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EDUCATION

Sept. 2008 - present:

- **MSc student, Networks and Distributed Systems (NDS)**, Department of Computer Science and Engineering, *Chalmers University of Technology (CTH)*, Sweden - *current GPA: 5/5*

Internet Technology (5)	Computer Security (5)
Distributed Systems (5)	Network Security (5)
Distributed Systems II (5)	Real-Time Systems (5)
Advanced Topics in NDS (5)	Parallel & Dist. Real-time Systems (5)
Language-based Security (5)	Artificial Intelligence (5)

2002 - 2007:

- **BSc, Computer Engineering**, Department of Electrical and Computer Engineering, Imam Reza University (IRU), Iran, - *GPA (of final two years): 18.06/20*
 - Thesis: “Automatic Installation and Administration of a Simple Self-healing High Performance Computing (HPC) Cluster Leveraging Open Source Solutions”

PROFESSIONAL EXPERIENCE

Selected list (of places I have worked part-time with):

- Lab Supervisor, **Chalmers University of Technology**, *Department of Computer Science & Engineering*, Computer Security (advanced course), (Sept. 2009-Nov. 2009)
- Consultant / Lecturer, **Sharif University of Technology**, *Advanced Information and Communication Technology research Center (AICTC)*, (2005-2008)
- R&D Engineer / Consultant / Lecturer, **Ferdowsi University of Mashhad (FUM)**, *Information Technology Services (ITS) Center*, Networking Department and High Performance Computing Center (HPCC) (2004-2008)
- Instructor, **Beynolmelal Informatics Institute**, Mashhad, (2003-2008)
- Instructor / Consultant, **Pazh IT Development Pioneers**, Mashhad, (2003-2008)
- Instructor / Consultant, *Information Technology Center of Mashhad University of Medical Sciences (MUMS)*, (2005-2006)

SEMINARS
PRESENTATIONS
WORKSHOPS

My invited talks:

- “*A Quick Guide to Becoming a Productive and Superstar Student*”, Chalmers Uni. of Technology, Göteborg, Sweden, (Apr. 2010) (Click to watch the video)
- “*How to Keep your Sanity in Chalmers, Thrive and Survive the Mighty Dark Hours*”, Reception for New International/Erasmus Students, Chalmers Uni. of Technology, Göteborg, Sweden, (Aug. 2009)
- F. Behnia, A. Samani, “*A Study of Security and Privacy Aspects of Social Networking Sites*”, Chalmers Uni. of Technology, Göteborg, Sweden, (May 2009)
- “*Myths, FAQs, Impressions ver. 2.0*”, 1st Iran ICDL Workshop, Mashhad, 120+ participants, (Dec. 2007)
- F. Behnia, M. A. Moulavi, “*Introduction to Ferdux: Linux Distribution of Ferdowsi University of Mashhad*”, 3rd Information and Knowledge Technology (IKT’2007) Conference, FUM, Iran, (Nov. 2007)
- “*Myths, FAQs, Impressions Surrounding GNU/Linux and FOSS in General*”, 2nd Young Computer Researchers Conference, Mashhad, 300+ participants, (Apr. 2007)
- “*Linux Kernel Internals: A Quick Overview of Design Concepts of Operating Systems in the Open Source World*”, Operating Systems course, IRU, (Jan. 2006)
- “*Decision Criteria for Choosing an Open Source Business Strategy*” and “*Cost Reduction and Security Enhancement Approaches Leveraging FOSS*”, Islamic Azad University of Mashhad, Department of Computer Engineering, Research Week, (Dec. 2005)
- “*Open Source vs Proprietary Software Projects: Copyright and Development Model*”, Islamic Azad University of Ferdows, (Sept. 2005)
- “*Linux from Different Perspectives: Business, Security, Costs and Enterprises*”, School of Economic Affairs, 100+ participants, (Sept. 2005)
- “*An Operating System Design Comparison between Linux and Windows from the Perspectives of Stability and Security*”, 2nd Outstanding Models of Training Skills of Technical and Vocational Training Organization of Iran, Mashhad Information Technology Training Center, Mashhad, (July 2005)
- “*The State of Linux in Iran and an Introduction to Farsilinux, the National Linux Operating System*”, and “*Compatibility and Coexistence of Linux in a Heterogeneous Network*”, Payam Nour University of Mashhad, 100+ participants, (Mar. 2005)
- Three Consecutive Workshops covering the following topics at Beynolmelal Informatics Institute, 100+ participants, (Feb. 2005)
 - “*Linux on the Desktop: Issues, Trends and Opportunities*”
 - “*Design and Implementation of a Migration Strategy for Effective Deployment of Linux in a Windows World*”
 - “*A Survey of Existing Programming Tools and Environments in Linux*”
 - “*Open Source Business Model*”
 - “*Open Source Culture*”

RESEARCH
PROJECTS

I have been part of:

@Sharif University of Technology, (2005-2008)

Iran Free/Open Source Software national project: This project has aimed at setting the ground for an alternative operating system in Iran based on the localization of GNU/Linux and the most widely used FOSS, eradicating the essential problems associated with the Persian language in the GNU/Linux internationalization process and most popular FOSS as well as enhancing awareness and promoting the culture of

using FOSS that provide a reliable and secure IT infrastructure, vendor independence, ease of localization, freedom of issues caused by copyright and WTO membership, long term financial benefit and promotion of local software industry.

@Ferdowsi University of Mashhad, ITS Center, (2005-2008)

Ferdux: (FERDowsi University linuX) as Senior Researcher and Developer. To provide a consistent, stable, secure and flexible operating system platform that can integrate well with the existing IT systems in the campus as well as future LDAP infrastructure, a Linux distribution has been derived from Debian and Kubuntu distributions, customized and localized with the various campus and Farsi users' needs in mind. All the packages are pre-configured and the CD can be used in both Live-CD and Install modes. It has been released in two editions: Desktop and Developer. This can be the largest open source migration in the region. (Advisor: M. Kahani) (2007-2008)

AICC: (Automatic Installation & Configuration of Linux-based Clients) as Senior Researcher. This project aims at providing a solution enabling the mass installation and configuration of Ferdux, based on existing open source projects. It will be tested on several computers as a pilot program to prepare the grounds for the mass deployment on more than 4000 computers of the campus in the next three years. (Advisor: M. Kahani) (2007-2008)

Internet Kiosks: The aim of this project is to provide a simple, efficient and robust platform for the special purposes of Internet (web) kiosk systems. The project specification mandates Linux as the base platform. Special issues needed to be addressed in setting up a kiosk, include certain user interface configurations, security and compatibility with existing hardware. For this purpose a customized and limited version of Ferdux has been created with all the required functionalities. (Advisor: M. Kahani) (2007-2008)

Traffic Shaper: as Senior Researcher. Traffic Shaper/Control is an open source packet queuing subsystem for controlling network bandwidth based on IP address or other parameters that can be marked by iptables/netfilter in Linux systems. It includes classifying, scheduling and shaping. We used Hierarchical Token Bucket (HTB) mechanism to classify and queue the network traffic based on IP addr. or ports. (Advisor: M. Kashmiri) (2006-2007)

Simorgh High Performance Cluster: as Instructor and Researcher. Simorgh Cluster provides scientific computing services to Computer and Science departments for their CPU intensive applications and also provides a platform for researchers working in the field of Parallel and Distributed Computing. It is fully functional and works with LAM/MPI, Torque resource manager, Maui cluster scheduler and Ganglia monitoring tool (Advisor: S. Abrishami) (2005-2006)

Other projects: **Setting up a Mail Hub, Antispam and Antivirus** for the mail servers

@Imam Reza University, (Fall 2006)

Ideallinux: Building a Linux distribution aimed at Computer Networks education and lab with NS2, etheral and other useful tools as well as some educational animations and applets

PUBLICATIONS

- E. Bagheri, F. Behnia, M. Feizi, F. Ensan, "A Novel Fuzzy Control Model of Traffic Light Timing at an Urban Intersection", Proceedings of the 3rd International Conference on Information and Knowledge Technology (IKT), Mashhad, Iran, 2007.
- Contribution, S. T. Zargar, M. Amir Moulavi, R. Buyya, M. Naghibzadeh, "RRNA: Reliable Soft Real-Time Network Aware Grid Scheduling Algorithm Using Round Trip Time", 12th Communications and Networking Simulation Symposium, USA, 2009.
- E. Abolahrar, F. Behnia, M. Hassanabadi, A. Samani, "An NLP-Based Automated Help Desk", Technical Report, Chalmers Uni. of Technology, June 2009

- F. Behnia, “*Introduction to TOGAF: The Open Group Architecture Framework*”, Information Era Magazine, Issue 22, June 2007.
- F. Behnia, H. Mahrooghi, “*A Survey of Open Source Solutions for Automatic Installation and Configuration of Linux*”, Information Era Magazine, Issue 26, Oct. 2007.
- F. Behnia, M. A. Moulavi, “*Handbook of Ferdoux: the Linux Distribution of Ferdowsi University*”, FUM, ITS Center, Networking Department, 2007-2008
- M. A. Moulavi, F. Behnia, “*A Quick Guide on Traffic Control*”, Networking Department, ITS center, Ferdowsi University of Mashhad, 2007.
- Z. Taghikhaki, F. Behnia, “*Setting up a Mail Hub and Antispam server for Sendmail mail servers*”, Networking Department, ITS Center, Ferdowsi University of Mashhad, 2006.
- Contribution, M. Abbaspour, E. K. Goharshadi, “*Computation of some thermodynamics, transport, structural properties, and new equation of state for fluid neon using a new intermolecular potential from molecular dynamics simulation*”, accepted for publication in Journal of Theoretical Chemistry Accounts, 2010
- F. Behnia, “*Packet Filtering and Stateful Packet Inspection in Netfilter/iptables: Linux Firewalling Framework*”, ready for submission.
- F. Behnia, H. Nosrati, “*MPLS: Architecture, Operation and Essential Concepts*”, ready for submission.

MEMBERSHIPS
HONORS
SERVICES

- Reviewer of
 - *IEEE ICC Communication and Information Systems Security Symposium, (CISS’09)*, 2009, Dresden, Germany
 - *9th ACIS International Conference on Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing*, 2008 (**SNPD’08**), Thailand
 - *2nd IEEE WoWMoM Workshop on Adaptive and Dependable Mobile Ubiquitous Systems*, 2008 (**ADAMUS’08**), USA
 - *66th IEEE Vehicular Technology Conference*, 2007 (**VTC’07**), USA
- Internship & IT Manager of ***Destination Asia***, a student organization at Chalmers University of Technology & University of Gothenburg, (Aug. 2009-present)
- Treasurer & IT Manager at ***Iranian Students Association at Chalmers***, (Nov. 2009-present)
- Member of technical committee of Iran Free/Open Source Software National Project, Sharif University of Technology, (2005-2008)
- Founder and previous member of ***High Performance Computing Center (HPCC)***, FUM, (2005)
- Founder and member of the Board of Directors of ***National Linux User Group of Iran***, (2004-2007)
- Founder and member of the Board of Directors of ***Mashhad Linux User Group***, (2007-2009)
- Awarded Full Financial Support by University of New Brunswick for MSc studies in Computer Science, Canada (2008)
- Technical/Organizational Executive member at

- *MiNEMA (Middleware for Network Eccentric and Mobile Applications) Winter School, Göteborg, Sweden (Mar. 2009)*
 - *Free Society Conference 2008 & 2009 (FSCONS 2008 & 2009)*, Göteborg, Sweden, (Oct. 2008-present)
 - Events of Iranian Students Association at Chalmers, (Mar. 2009-present)
 - Events of Destination Asia e.g. seminar with SKF & Capgemini. (Nov. 2009-present)
 - *3rd Information and Knowledge Technology Conference (IKT 2007)*, Mashhad, Iran, (Nov. 2007)
 - *1st Linux Installation Festival*, Mashhad, Iran, (Sept. 2007)
 - *2nd Free/Open Source Software Congress*, Sadjad Higher Education Center, Mashhad, Iran, (May 2007)
 - Head of Student Executive Committee, *1st Free/Open Source Software Congress*, Imam Reza University, (June 2006)
 - *1st Conference on Information Technology, Software and e-city*, Mashhad, Iran, (Sept. 2004)
- Moderator of *www.technotux.org*, the prominent free/open source software portal for Persians, (2004-2007)
 - Webmaster and Moderator of *www.linuxiran.org*, first free/open source software and GNU/Linux website in Iran, (2004-2007)
 - Student Representative & Evaluator for Computer Security, Network Security, Distributed Systems I & II, Real-time Systems, Artificial Intelligence, Language-based Security, Chalmers Uni. (2008-2009)
 - Editor of Computer Section of Prospect Magazine, Quarterly Student Journal of Faculty of Letters and Humanities, Ferdowsi University of Mashhad, Issues 10 and 12, (2006)
 - Ranked *2nd place*, *1st National Robocup Contest*, Shiraz, with *Simulation team of Sama Robotic Lab.* of Mashhad, Islamic Azad University of Mashhad, Sama Technical and Vocational Higher Education Center, technical co-coach, Shiraz, (Feb. 2008)
 - Ranked top 2% of the country in the National Annual University Entrance Exam (NAUEE) with around 350,000 applicants in the country, Iran, (2002)
 - Student member of ACM, (2007-now)

TEACHING

Instructor and Course Developer

- **Beynolmelal Informatics Institute**, Mashhad, (Comptia Linux+ and Red Hat RHCE, Network Security, Specialized English, Programming Fundamentals, Certified Internet Webmaster (CIW), ICDL), (2003-2008)
- **Pazh IT Development Pioneers**, Mashhad, Red Hat RHCE and Comptia Linux+, (2003-2008)
- Other places: IT Department of Municipality of Mashhad, Mashhad Information Technology Training Center (MITTC) of Iran's Technical and Vocational Training Organization, Shargh Foreign Languages and Information Technology Education Center, Mehr Sadjad Cultural Institute, College of Professional and Vocational Studies of Ferdowsi University of Mashhad
- General English in **Kish, Kish Air** and **Zabansara Language Institutes**, (2001-2007)

Private Tutor:

Comptia iNet+ & Network+

Comptia Security+

Object-oriented Programming with Java

Teacher Assistant:

Computer Security Lab@Chalmers (Fall 2009)

Operating Systems Lab@IRU (Spring 2006)

Computer Networks@IRU (Fall 2006)

SELECTED B.Sc. COURSES
 Computer Architecture (19/20) Principles of Database Design (18.25/20)
 Internet Engineering (20/20) Engineering Math. (15.5/20)
 Security of Computer Networks (18/20) Fundamentals of IT (20/20)
 Computer Networks (18/20) Operating Systems (19/20)
 Software Engineering I (18.75/20) Compiler Design (18.75/20)
 Software Engineering II (20/20) Datamining: Concepts & Applications (workshop)

RESEARCH INTERESTS
 Distributed Systems (P2P, Ad-hoc/Sensor, Grid/Cloud Computing, Manycore computing)
 Real-time Systems (scheduling, communication)
 Security & Privacy (IDS, DoS, Social Networks, Wireless/Mobile security)
 Social-networking-inspired Access Control, Grid Computing, Routing, Overlay Networks, Resource Discovery, etc.

LANGUAGE SKILLS
 English: fluent (TOEFL iBT: 116/120), Swedish: basics (& in progress), Persian: native, Arabic: basics, French: basics

COMPUTER SKILLS
 Network Services: DNS, Apache, FTP, DHCP, Mail, Proxy, Firewall, Bandwidth management, IPv6, etc.
 Security: Firewall/iptables, Nmap, Wireshark, PGP/GPG, Nessus, Tcpdump, OpenSSL, Snort
 Operating Systems: Linux (Several distributions e.g. Red Hat (based), Debian, (K)Ubuntu, Knoppix, SUSE, Mandriva , Windows (98/Me/2000/XP), FreeBSD, OpenSolaris, Cisco IOS, Symbian
 Programming: Java, C, Ada, shell, Eclipse, HTML, familiar with Python, PHP, NetBeans
 DBMS: MySQL, phpMyAdmin, familiar with SQL server 2000
 Documentation & Presentation Tools: L^AT_EX (L^AT_EX), Freemind
 Virtualization & Emulation: VMware, Wine, Virtual Box, Qemu
 System administration: FAI, Cfengine, Webmin, Nagios, Linuxconf, etc.
 Scientific Tools: NS2, MATLAB
 Content Management Systems: Joomla, XOOPS, PostNuke, WordPress, PHPNuke

RECREATIONAL INTERESTS
 personal development and productivity topics, languages, nutrition research, high intensity training, entrepreneurship, behavioral economics, management, pencil drawing, public speaking, classical music, word play, tea, travel, taking fun seriously! etc.

REFERENCES
 References from Chalmers University of Technology, Sharif University of Technology, Ferdowsi University of Mashhad & Imam Reza University can be provided upon request.