Elahe Jalalpour

Curriculum Vitae

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Research Interests

- Computer Networks
- Software Defined Networking
- Internet of Things
- Computer and System Architectures
- FPGA

Education

2012–2016 **B.Sc. Computer Engineering**, *Amirkabir University of Technology*, Tehran.
GPA – 17.31 out of 20

2008–2012 **High School, Diploma of Math & physics**, *Manzoumeh Kherad Institute*, Tehran.
GPA – 19.80 out of 20

Patents

Title *Intelligent Control System of Steering Wheel*
Issued 03 / 2011
IR Patent 69363

Honors & Awards

2013–2015 Ranked in top 4 Computer Hardware Engineering Students

2014 Eligible to choose **second major** due to outstanding performance

2012 Ranked in top 0.6% of Nation-wide University Entrance Exam among all Iranian Students of Math. & Physics

2012 Ranked in top 0.1% of Nation-wide University Entrance Exam among all Iranian Students of Foreign Languages (English)

2011 **1st** Place in Iran Open Robocup Competition Demo League as a Member of *Kherad* team

2010 & 2011 **Semi-finalist** at National Mathematics Olympiad

2009 Earned **Merit Medal** in International World Youth Mathematics Competition (IWYMIC) Durban, South Africa

Working Experiences

Summer 2015 **Iranian Telecommunication Research Center (ITRC)**, *Tehran, Iran*.
ITRC is the leading company in Iran in the field of Network. Since I was interested in SDN, I worked on a firewall application then I ran it on Ryu controller. The source code can be found here.

Publications & Research Experiences

2015 **Consistent Update in SDN**, *E.Jalalpour*, Research Methods Course.
Technical report for Research Method and Technical Report Writings course (In Persian)

2015 **Introduction to IoT and Building Management Systems**, *Prof.Bakhshi, E.Jalalpour, P.Alvani*, Department of Computer Engineering and Information Technology, Amirkabir University of Technology, Tehran, Iran.
Research on different operating systems, frameworks and platforms in IoT

Teaching Experiences

Winter 2015 **Teacher Assistant**, Computer Architecture, Amirkabir University of technology, Under supervision of Prof.Zarandi.

Fall 2015 **Teacher Assistant**, Introduction to Programming, Amirkabir University of technology, Under Supervision of Prof.Bakhshi.

Fall 2015 **Teacher Assistant**, Computer Networks II, Amirkabir University of technology, Under Supervision of Prof.Sabaei.

Fall 2015 **Teacher Assistant**, Operating Systems, Amirkabir University of technology, Under Supervision of Prof.Zarandi.

Computer skills

- **Programing & Hardware Design Languages**.
  Java, C/C++, Python 3, Verilog, VHDL, 8086 Assembly
- **Typesetting**.
  LaTeX, Microsoft Word, LibreOffice, Pages, Vim
- **Hardware Simulators**.
  Xilinx ISE Design Suite, P-Spice, H-Spice, Proteus
- **Web Development**.
  HTML

- **Other**.
  Netbeans, Eclipse, Wireshark
- **Operating Systems**.
  Windows, OS X, Ubuntu, Fedora

Languages

Persian (Farsi) **Native proficiency**

English **Professional working proficiency**

French **Elementary proficiency**

Projects

2015 **SDN101**, PYTHON.
Implementation of SDN based firewall (SDWall) and topology manager on ryu platform

2012 **Phone Book**, C.
Implementation of Phone Book with file

2014 **HTTP Proxy**, JAVA.
Implementation of a HTTP and HTTPS proxy server

2013 **JUMONG (Java Ultimate Maze Obstacle Neutralizer Game)**, JAVA.
Implementation of a graphical game with multiplayer support

2013 **River Rider**, JAVA.
Implementation of a graphical game with multi-threading support

2013 **Bubbles**, JAVA.
Implementation of a Java based bubbles screen saver

2014 **FAT Parser**, C.
Implementing FAT-16 and FAT-32 parser with delete, list and retrieve support

2014 **Disassembling DOS Executable File**.

2015 **FPGA Co-Design**, C & VHDL.
Implementing hardware modules in VHDL and using them for having a cryptographic algorithm in a software environment

2015 **Transistor Level Ripple Adder**, HSPICE.
Designing and implementing transistor level ripple adder in three families: Static CMOS, Dynamic CMOS and DCVSL

2013 **Simon Game**, *Proteus*.
Design and implementation of Simon game's logic circuit

References

Professor Bahador Bakhshi, *Assistant Professor*.
Computer Engineering and IT Department, Amirkabir University of Technology
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Professor Hamid Reza Zarandi, *Assistant Professor*.
Computer Engineering and IT Department, Amirkabir University of Technology
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Professor Masoud Sabaei, *Assistant Professor*.
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