

# Elahe Jalalpour

## Curriculum Vitae

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### Research Interests

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

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### 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 – 19.74 out of 20*

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### Patents

Title *Intelligent Control System of Steering Wheel*

Issued 03 / 2011

IR Patent 69363

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### 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.**  
L<sup>A</sup>T<sub>E</sub>X, 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)	<b>Native proficiency</b>
English	<b>Professional working proficiency</b>
French	<b>Elementary proficiency</b>

## --- Graduate Courses

- Fall 2015 **Advance Computer Networks**, *Professor Siavash Khorsandi*.
- Fall 2015 **Optimization and its Applications in Computer Networks**, *Professor Bahador Bakhshi*, (Audited).

## --- 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

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## 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*.

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**Professor Masoud Sabaei**, *Assistant Professor*.

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