# Elahe Jalalpour

# Curriculum Vitae

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## Research Interests

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

## 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.

## Teaching Experiences

Winter 2014 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.

## 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

## 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

# 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

## Languages

Persian Native proficiency

(Farsi)

English Professional working proficiency

French **Elementary proficiency** 

## Projects

2015 **SDN101**, PYTHON.

Implementation of SDN based firewall 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 Email: bbakhshi@aut.ac.ir

Professor Hamid Reza Zarandi, Assistant Professor.

Computer Engineering and IT Department, Amirkabir University of Technology

Email: h\_zarandi@aut.ac.ir

Professor Masoud Sabaei, Assistant Professor.

Computer Engineering and IT Department, Amirkabir University of Technology Email: sabaei@aut.ac.ir

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