Elahe Jalalpour

Curriculum Vitae

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Research Interests

- Computer Networks
- Software Defined Networking
- Internet of Things
- o 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

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 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.

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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.

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