

# ParhamAlvani

Junior Undergraduate Student of Software Engineering



## contact

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<http://1995parham.github.io>

## interests

### professional:

- Internet of Things (IoT)
- Software Defined Networking (SDN)
- Network Function Virtualization (NFV)
- Kernel Hacking
- Graph Theory
- Mathematical Analysis

### personal:

- Chess
- Running

## education

2013–2017

**Bachelor** of Computer Software Engineering  
Cumulative GPA: 18.96/20 (109 Units)

Amirkabir University of Technology

2009–2013

**High School**, Diploma of Math & Physics  
GPA: 19.45/20

Energy Atomic High School

## languages

Persian (Farsi):

Native proficiency

English:

Limited working  
proficiency

## honors & awards

## programming

♥ C, Go

Python3, PHP

AMD64 Assembly,

AVR Assembly,

Java SE, Java EE

CSS3 & HTML5

NodeJs, JS

## projects

 Github

## last-update

January 10, 2017

- Spring 2016    Achieved **2nd** Place in 3rd National Digital Design Contest of Iran ASIC League as a Member of Polytechnic team
- Spring 2016    Achieved **3rd** Place in 3rd National Digital Design Contest of Iran CoDesign League as a Member of Polytechnic team
- 2015            Eligible to choose **second major** due to outstanding performance
- Spring 2015    Awarded as an Outstanding Student by the head of Computer Engineering and Information Technology department, Amirkabir University of Technology
- Spring 2015    Achieved **3rd** Place in 2nd National Digital Design Contest of Iran CoDesign League as a Member of Polytechnic team
- Fall 2014        Achieved **3rd** Place in 14th Amirkabir ACM International Collegiate Programming Contest (ICPC) as a Member of 703 team
- Fall 2014        Participated in 39th Asia Regional ACM International Collegiate Programming Contest (ICPC) in Sharif University of Technology as a Member of 703 team
- 2013            Ranked in 0.2% among more than 251,956 participators in Nation-wide University Entrance Exam among all Iranian Students of Math. & Physics
- 2010            **Semi-finalist** at National Mathematics and Computer Olympiads
- 2011            **Semi-finalist** at National Mathematics and Computer Olympiads
- 2012            **Semi-finalist** at National Mathematics and Computer Olympiads
- 2010            Achieved **Merit Award** in the International Mathematics Competition (IMC) Icheon, South Korea
- 2006-2009      Member of National Organization for Development of Exceptional Talents (NODET)

## research experience

- 2015-present **Department-wide platform for IoT and building management systems**  
under supervision of Prof.Bakhshi, Department of Computer Engineering and Information Technology, Amirkabir University of Technology, Tehran, Iran.  
Research on different operating systems, frameworks and protocol stacks in IoT
- 2016-present **Middleware solution for IoT** under supervision  
of Prof.Bakhshi, Department of Computer Engineering and Information Technology, Amirkabir University of Technology, Tehran, Iran.  
Research and development on I1820 platform

## skills & expertise

- **Functional Programming Languages**  
SML, Lisp, Haskell
- **Hardware Definition Languages**  
Verilog HDL, VHDL, Spice
- **Networking Tools and Protocols**  
ONOS Platform, FloodLight, Ryu, Mininet, GNS3, Wireshark, Cisco Packet Tracer, OpenFlow1.3
- **Typesetting**  
L<sup>A</sup>T<sub>E</sub>X, Microsoft Word, LibreOffice, Pages, Vim
- **Hardware Simulators**  
Xilinx Vivado Design Suite, P-Spice, H-Spice, Proteus, Quartus II
- **DB Management Systems**  
MySQL, PostgreSQL, MongoDB, Microsoft SQL Server
- **Operating Systems**  
Ubuntu, Ubuntu Server, CentOS, OS X, Windows, Windows Server 2012
- **Other**  
Netbeans, IntelliJ, Eclipse, Octave, Matlab
- **Programming Framework**
  - C Frameworks**
    - CGI Programming
    - BSD Socket Programming
    - UNIX System Programming
    - GTK
    - Gnome
  - Java Frameworks**
    - Maven
    - Log4j
    - JPA(Java Persistence API)
    - Hibernate
    - JSP
    - JSF

## teaching experiences

Fall 2014	<b>Principles of Computer and Programming</b> Amirkabir University of technology, Under Supervision of Prof. Bakhshi.	Teaching Assistant
Spring 2015	<b>Advance Programming</b> Amirkabir University of technology, Under Supervision of Prof. Noorhosseini.	Teaching Assistant
Spring 2015	<b>Discrete Mathematics</b> Amirkabir University of technology, Under Supervision of Prof. Fallah.	Teaching Assistant
Spring 2015	<b>Introduction to Python Programming</b> 7th Amirkabir Linux Festival, Python Workshop	Instructor
Fall 2015	<b>Principles of Computer and Programming</b> Amirkabir University of technology, Under Supervision of Prof. Bakhshi.	Teaching Assistant
Spring 2016	<b>Advance Programming</b> Amirkabir University of technology, Under Supervision of Prof. Noorhosseini.	Teaching Assistant
Spring 2016	<b>Principles of Database Design</b> Amirkabir University of technology, Under Supervision of Prof. Momtazi.	Teaching Assistant
Spring 2016	<b>Microprocessor I</b> Amirkabir University of technology, Under Supervision of Prof. Homayounpour.	Teaching Assistant
Spring 2016	<b>Engineering Statistics and Probability</b> Amirkabir University of technology, Under Supervision of Prof. Amir Haeri.	Teaching Assistant
Fall 2016	<b>Principles of Computer and Programming</b> Amirkabir University of technology, Under Supervision of Prof. Bakhshi.	Teaching Assistant
Fall 2016	<b>Principles of Database Design</b> Amirkabir University of technology, Under Supervision of Prof. Amir Haeri.	Teaching Assistant
Fall 2016	<b>Data Structure Design</b> Amirkabir University of technology, Under Supervision of Prof. Dehghan.	Teaching Assistant
Spring 2017	<b>Principles of Database Design</b> Amirkabir University of technology, Under Supervision of Prof. Momtazi.	Teaching Assistant
Spring 2017	<b>Computer Architecture</b> Amirkabir University of technology, Under Supervision of Prof. Shiri.	Teaching Assistant

## graduate courses

Fall 2015	<b>Advanced Computer Networks</b>	Professor Khorsandi
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## certifications

- CompTIA Network+
- Supporting Windows 8.1(70-688)
- Installing and Configuring Windows Server 2012(70-410)
- Administering Windows Server 2012(70-411)
- Configuring Advanced Windows Server 2012 Services(70-412)
- Designing and Implementing a Server Infrastructure(70-413)
- Implementing an Advanced Server Infrastructure(70-414)

- LPIC-1(101-102)
- LPIC-2(201-202)
- Cisco CCENT