

# Contact Amirkabir University of Technology, Hafez Ave, Tehran, Iran

parham.alvani@gmail.com parham.alvani@aut.ac.ir http://1995parham.me

## languages

Persian (Farsi): Native proficiency English: Limited working proficiency

# **programming** ♥ C, Go, Python3, Node

♥ C, Go, Python3, N PHP AMD64 Assembly, AVR Assembly, Java SE, Java EE CSS3 & HTML5 JS

# **projects**Github

**last-update** April 4, 2018

## interests

#### professional:

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

#### personal:

- Chess
- Running

## education

2017–2019	<b>Master</b> of Computer Networks GPA: 19/20	Amirkabir University of Technology
2013–2017	<b>Bachelor</b> of Computer Software Engineering GPA: 18.94/20	Amirkabir University of Technology
2009–2013	<b>High School,</b> Diploma of Math & Physics GPA: 19.45/20	Energy Atomic High School

### honors & awards

- Summer 2016Achieved 10th Place in Final National Scientific Olympiad in Computer Engineering Spring 2016 Achieved 4th Place in Semi-Final National Scientific Olympiad in Computer Engineering 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
  - 2012 **Semi-finalist** at National Mathematics and Computer Olympiads
  - 2011 **Semi-finalist** at National Mathematics and Computer Olympiads
  - 2010 **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

2017—presentGeneral purpose IoT platform, design for scalability Under supervision of Prof.Bakhshi. AoLab

Research and develop Distributed, Docker based I1820

2015–2016 Department-wide platform for IoT and building management systems Under supervision of Prof.Bakhshi, AoLab

Research on different operating systems, frameworks and protocol stacks in

2016–2017 Middleware platform for IoT based on agent based approch

Under

supervision of Prof.Bakhshi, AoLab Research and develop I1820

Spring 2016 Resource Provisioning in Sotfware Defined Networking This research was done for Research Method and Technical Writings course

## work experience

Summer 2016IoT hardware and sotfware developer Iranian Telecommunication Reseach Center

ITRC, Tehran, Iran

Summer internship in the country's leading research center of telecommunication network systems

## 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, OpenFlow1.5

#### Typesetting

LATEX, 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 Desktop, Ubuntu Server, CentOS, OS X, Windows, Windows Server 2012, VMware vSphere 6.5

#### Othe

Netbeans, IntelliJ, Eclipse, Octave, Matlab

#### Frameworks

#### **Virtualization Frameworks**

- Docker
- Docker Compose
- OpenVSwitch

#### **C Frameworks**

- CGI Programming
- BSD Socket Programming
- UNIX System Programming
- GTK
- Gnome

#### **Java Frameworks**

- Maven
- Log4i
- JPA (Java Persistence API)
- Hibernate
- JSP
- JSF

# teaching experiences

T-II 2044	Principles of Computer and Property in
Fall 2014	<b>Principles of Computer and Programming</b> Teaching Assistant Amirkabir University of technology, Under Supervision of Prof. Bakhshi.
Spring 2015	<b>Advance Programming</b> Amirkabir University of technology, Under Supervision of Prof. Noorhosseini.
Spring 2015	<b>Discrete Mathematics</b> Amirkabir University of technology, Under Supervision of Prof. Fallah.
Spring 2015	Introduction to Python Programming 7th Amirkabir Linux Festival, Python Workshop
Fall 2015	<b>Principles of Computer and Programming</b> Teaching Assistant Amirkabir University of technology, Under Supervision of Prof. Bakhshi.
Spring 2016	<b>Advance Programming</b> Amirkabir University of technology, Under Supervision of Prof. Noorhosseini.
Spring 2016	<b>Principles of Database Design</b> Amirkabir University of technology, Under Supervision of Prof. Momtazi.
Spring 2016	<b>Microprocessor I</b> Amirkabir University of technology, Under Supervision of Prof. Homayounpour.
Spring 2016	<b>Engineering Statistics and Probability</b> Teaching Assistant Amirkabir University of technology, Under Supervision of Prof. Amir Haeri.
Spring 2016	Introduction to Golang Programming 8th Amirkabir Linux Festival, Go Workshop
Spring 2016	IoT and IPv6 8th Amirkabir Linux Festival Speaker
Fall 2016	<b>Principles of Computer and Programming</b> Teaching Assistant Amirkabir University of technology, Under Supervision of Prof. Bakhshi.
Fall 2016	<b>Principles of Database Design</b> Amirkabir University of technology, Under Supervision of Prof. Amir Haeri.
Fall 2016	<b>Data Structure Design</b> Amirkabir University of technology, Under Supervision of Prof. Dehghan.
Spring 2017	<b>Principles of Database Design</b> Amirkabir University of technology, Under Supervision of Prof. Momtazi.
Spring 2017	<b>Computer Architecture</b> Amirkabir University of technology, Under Supervision of Prof. Shiri.
Spring 2017	Introduction to IoT Platform 2nd Iran IoT Conference, Platform Workshop Instructor
Spring 2017	<b>Golang, The Future of C</b> 9th Amirkabir Linux Festival
Spring 2017	<b>I1820, The IoT Platform</b> 9th Amirkabir Linux Festival
Summer 2017	Advanced Python Programming SSC IoT Summer Course
Summer 2017	<b>7An Introduction to IoT Platforms</b> SSC IoT Summer Course
Fall 2017	<b>Principles of Computer and Programming</b> Teaching Assistant Amirkabir University of technology, Under Supervision of Prof. Bakhshi.
Spring 2018	<b>Microprocessor I</b> Amirkabir University of technology, Under Supervision of Prof. Homayounpour.
Spring 2018	<b>Advance Programming</b> Amirkabir University of technology, Under Supervision of Prof. Noorhosseini.
Spring 2018	<b>Computer Networking</b> Amirkabir University of technology, Under Supervision of Prof. Sabaei.

Spring 2018 **Microprocessor Lab** 

## graduate courses

Fall 2015 Advanced Computer Networks

Professor Khorsandi

Spring 2017 **Computer Networks Management** 

Professor Bakhshi

## 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
- VMware vSphere: Install, Configure, Manage
- VMware vSphere: Optimize and Scale