

ParhamAlvani

MSc. Student of Computer Networks



contact

Amirkabir University of
Technology,
Hafez Ave,
Tehran, Iran

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parham.alvani@gmail.com
parham.alvani@aut.ac.ir
<https://1995parham.github.io>

languages

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

programming

♥ C, Go, Python3, Node
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	Master of Computer Networks GPA: 19/20	Amirkabir University of Technology
2013–2017	Bachelor of Computer Software Engineering GPA: 18.94/20	Amirkabir University of Technology
2009–2013	High School , Diploma of Math & Physics GPA: 19.45/20	Energy Atomic High School

honors & awards

- Summer 2016 Achieved 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–present **General 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 IoT
- 2016–2017 **Middleware platform for IoT based on agent based approach** Under supervision of Prof.Bakhshi, AoLab
Research and develop I1820
- Spring 2016 **Resource Provisioning in Software Defined Networking** P. Alvani
This research was done for Research Method and Technical Writings course

work experience

- Summer 2016 **IoT hardware and software developer** Iranian Telecommunication Research 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**
L^AT_EX, 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
- **Other**
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
 - Log4j
 - JPA (Java Persistence API)
 - Hibernate
 - JSP
 - JSF

teaching experiences

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

Fall 2017	Principles of Computer and Programming Amirkabir University of technology, Under Supervision of Prof. Bakhshi.	Teaching Assistant
Spring 2018	Microprocessor I Amirkabir University of technology, Under Supervision of Prof. Homayoun-pour.	Teaching Assistant
Spring 2018	Advance Programming Amirkabir University of technology, Under Supervision of Prof. Noorhosseini.	Teaching Assistant
Spring 2018	Computer Networking Amirkabir University of technology, Under Supervision of Prof. Sabaei.	Teaching Assistant
Spring 2018	Microprocessor Lab Amirkabir University of technology, Under Supervision of Prof. Homayoun-pour.	Instructor
Spring 2018	Computer Networking Lab Amirkabir University of technology, Under Supervision of Prof. Sabaei.	Instructor
Spring 2018	Advance Programming Lab Amirkabir University of technology, Under Supervision of Prof. Noorhosseini.	Instructor

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