ParhamAlvani

MSc. Student of Computer Networks

interests

professional:

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

personal:

- Chess

education

2017–2019	**Master** of Computer Networks GPA: 18.77/20	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

contact

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Technology,
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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

December 28, 2018

honors & awards

Summer 2017	Qualified to Direct Admission to graduate school (M.Sc.) of Computer Engineering and IT Department, AUT
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

M.Sc. Project	**SFC Requests Admission Control by Considering VNFMs** Under supervision of Prof.Bakhshi Maximize profit optimization problem for accepting SFCs and provides VNFMs for them
B.Sc. Project	**General purpose IoT platform, design for scalability** Under supervision of Prof.Sabaei Research and develop Distributed, Docker based IoT Platform named Bamboo
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 approch** Under supervision of Prof.Bakhshi, AoLab Research and develop I1820
Spring 2016	**Resource Provisioning in Sotfware Defined Networking** P. Alvani This research was done for Research Method and Technical Writings course

work experience

Summer 2016	**IoT hardware and sotfware developer** Iranian Telecommunication Reseach Center ITRC, Tehran, Iran Summer internship in the country's leading research center of telecommunication network systems
2017–2018	**LoRa enabled platform for smart agriculture** IoT Working Group of Amirkabir University of Technology, Tehran, Iran System Architect and Developer

extra-curricular activity

Spring 2016	**Scientific Director** Linux Festival
Fall 2016	**Techinal Team Member** ACM ICPC
Spring 2017	**Scientific Director** Linux Festival
Fall 2017	**Head of Technical Team** ACM ICPC
Fall 2018	**Head of Technical Team** ACM ICPC

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

- **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, 2015, 2016, 2017, 2018	**Principles of Computer and Programming** Amirkabir University of technology, Under Supervision of Prof. Bakhshi.	Teaching Assistant
Spring 2015, 2016, 2018	**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
Spring 2016, 2017	**Principles of Database Design** Amirkabir University of technology, Under Supervision of Prof. Momtazi.	Teaching Assistant
Spring 2016, 2018, Fall 2018	**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 Database Design** Amirkabir University of technology, Under Supervision of Prof. Amir Haeri.	Teaching Assistant
Fall 2016, 2017	**Data Structure Design** Amirkabir University of technology, Under Supervision of Prof. Dehghan.	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
Spring 2018, Fall 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, Fall 2018	**Computer Networking Lab** Amirkabir University of technology, Under Supervision of Prof. Sabaei.	Instructor

Spring 2018	**Advance Programming Lab**	Instructor
	Amirkabir University of technology, Under Supervision of Prof. Noorhosseini.	
Spring 2018	**Operating System Lab**	Instructor
	Amirkabir University of technology, Under Supervision of Prof. Zarandi.	

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