

# Sepehr Abdous

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## Education

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### Academic Qualification.....

#### Johns Hopkins University

##### *PhD*

School of Computer Science, Majoring in Computer Networks

**Baltimore**

*2019-Present*

#### Sharif University of Technology

##### *BSc, GPA: 17.06/20*

School of Computer Engineering, Majoring in Information Technology

**Thesis topic:** Evaluation of Load-Balancing Algorithms in NDN Networks

**Tehran**

*2014 - 2019*

#### Rahyar Highschool

*Diploma, GPA: 19.58/20*

Mathematics and Physics

**Tehran**

*2010–2014*

### Notable selected courses.....

- Computer Workshop (4/4)
- Fundamentals of Programming (4/4)
- Logic Design (4/4)
- Logic Design Lab (4/4)
- Dynamics of Discrete Systems (4/4)
- Computer Structure (4/4)
- Advanced Programming (4/4)
- Fundamentals of IT (4/4)
- Mathematical Statistics (4/4)
- Numerical Computation (4/4)
- Data Structures (4/4)
- Computer Architecture Lab (4/4)
- Introduction to Linear Algebra (4/4)
- Design of Algorithms (4/4)
- Operating Systems (4/4)
- IT Project Management (4/4)
- Fundamentals of Electric and Electronic Design (4/4)
- Digital System Design (4/4)
- Web Programming (4/4)
- Operating System Lab (4/4)
- Digital System Design Lab (4/4)
- Computer Networks (4/4)
- Computer Networks Lab (4/4)
- System Analysis and Design (4/4)

- *Electronic Commerce (4/4)*
- *Multimedia Systems (4/4)*

## Research Concentration

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- Computer Networking
- Large Scale Computing
- Mitigating Microbursts in Large Data Centers

## Experiences

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### Teaching Experiences.....

<b>Mathematical Statistics(TA)</b> <i>Dr Sharifi Zarchi</i> Fall 2018	<b>Tehran</b> <i>Sharif University of Technology</i>
<b>Data Structure(TA)</b> <i>Dr Ghodsi</i> Fall 2018	<b>Tehran</b> <i>Sharif University of Technology</i>
<b>Computer Structure(TA)</b> <i>Dr Asadi</i> Fall 2018	<b>Tehran</b> <i>Sharif University of Technology</i>
<b>Fundamentals of Operating Systems(TA)</b> <i>Dr Jalili</i> Fall 2018	<b>Tehran</b> <i>Sharif University of Technology</i>
<b>Information Technology Project Management(TA)</b> <i>Eng. Abtahi</i> Fall 2018	<b>Tehran</b> <i>Sharif University of Technology</i>
<b>Data Structure(TA)</b> <i>Dr Sharifi Zarchi</i> Spring 2018	<b>Tehran</b> <i>Sharif University of Technology</i>
<b>Numerical methods(TA)</b> <i>Dr Gharib</i> Spring 2018	<b>Tehran</b> <i>Sharif University of Technology</i>
<b>Fundamentals of Operating Systems(TA)</b> <i>Dr Jalili</i> Spring 2018	<b>Tehran</b> <i>Sharif University of Technology</i>

**Fundamentals of Operating Systems(TA)**

*Dr Jalili*  
Fall 2017

**Tehran**  
*Sharif University of Technology*

**Advanced Programming in Java(Head TA)**

*Dr Marvasti*  
Spring 2017

**Tehran**  
*Sharif University of Technology*

**Advanced Programming in Java(Head TA)**

*Dr Marvasti*  
Fall 2016

**Tehran**  
*Sharif University of Technology*

**Data Structure(TA)**

*DrJamzad*  
Fall 2016

**Tehran**  
*Sharif University of Technology*

**Advanced Programming in Java(TA)**

*Dr Marvasti*  
Spring 2016

**Tehran**  
*Sharif University of Technology*

**Fundamentals of Programming(TA)**

*Dr Gheibi*  
Fall 2015

**Tehran**  
*Sharif University of Technology*

**Work Experiences.....****HPDS(High Performance Data Storage) Company**

*Intern*

**Spring 2018**

*Tehran*

Responsible of automating the system update process by the use of python and system FIO tests

**Darmaneh Company**

*Android Developer*

**2016**

*Tehran*

Responsible of developing the Android app

**Darmaneh Company**

*React Native Developer*

**2017 & 2018**

*Tehran*

Responsible of developing the Android and IOS app by using React Native

**Research Experiences.....****Creating an AR-enabled NDN-based browser**

*UCLA REMAP group, Summer Internship at UCLA*

**Summer 2018**

*Los Angeles, CA*

Worked as an intern with UCLA REMAP group under the supervision of Prof. Jeff Burke and participated in some tasks of creating an AR-enabled browser from chromium which connects to the machine learning server and content servers using NDN as the base network architecture.

<https://remap.ucla.edu/category/team/>

## Experiment Development

2017

*Developing experiments on NDN P4*

Tehran

Worked with mini-NDN and P4 to create different experiments under the supervision of Dr. Hamed Yousefi from the University of Michigan

## Proximity-Aware Balanced Allocation in NDN networks

2017 - 2019

*BSc Thesis*

Tehran

Worked to figure out a way of load balancing regarding the communication cost as well in NDN networks under the advice of Dr. Gharib and supervision of Prof. Movaghar from Sharif University of Technology

## Stock market prediction

2017 - 2019

*Stock market analysis using machine learning*

Tehran

Worked under the supervision of Dr. Marvasti to use event detection and Tensorflow to predict stock market prices

## Honors

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### Finalist in Maryland Cyber Challenge

Baltimore

2019

Involved in one of the finalist teams (Alice Bob) in Maryland cyber challenge.

### CTF Contest Winner

Baltimore

2019

Involved in the team winning the CTF contest designed by Northrop Grumman in the hophacks hackathon.

### University Entrance Exam Ranking

Tehran

2014

Ranked 387 among more than 260000 participants in nationwide university entrance exam.

### Admission to Shairf University of Technology.

Tehran

2014

## Community Involvement

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- IEEE Community
- ACM Community

## Skills

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Computer.....

- mini-NDN: NDN network simulating tool
- JAVA
- Python
- C
- Android
- React Native
- HTML
- CSS

- JS
- Git
- Microsoft project
- omnet++

Language.....

**Persian:** native

**English:** Fluent - IELTS Band Score: 7.5

2018

English Language Exam Results.....

#### **IELTs:**

- Listening: 8.5
- Reading: 7.5
- Writing: 6
- Speaking: 7
- Band Score: 7.5

#### **GRE:**

- Verbal Reasoning: 145
- Quantitative Reasoning: 167
- Analytical Writing: 3.5

## **References**

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- **Dr. Ali Movaghar**, Professor at Sharif University of Technology  
**Email:** movaghar@sharif.edu  
**Webpage:** <http://sina.sharif.ac.ir/~movaghar/>
- **Dr. Jeff Burke**, Professor at UCLA  
**Email:** jburke@remap.ucla.edu  
**Email:** jburke@ucla.edu  
**Webpage:** <http://www.tft.ucla.edu/2011/09/faculty-jeff-burke/>  
**Webpage:** <http://jeff-burke.com/bio/>
- **Dr. Hossein Asadi**, Associate Professor at Sharif University of Technology  
**Email:** asadi@sharif.edu  
**Webpage:** <http://sharif.edu/~asadi/>
- **Dr. Mansour Jamzad**, Associate Professor at Sharif University of Technology  
**Email:** jamzad@sharif.edu  
**Webpage:** <http://sina.sharif.edu/~jamzad/>
- **Dr. Mohammed Gharib**, Lecturer at Sharif University of Technology  
**Email:** gharib@ce.sharif.edu  
**Webpage:** <http://ce.sharif.edu/~gharib/>
- **Eng. Seyed Ebrahim Abtahi**, Assistant Professor at Sharif University of Technology  
**Email:** abtahi@sharif.edu  
**Webpage:** <http://sharif.edu/~abtahi/>

- **Dr. Ali Sharifi-Zarchi**, Assistant Professor at Sharif University of Technology  
**Email:** asharifi@sharif.ir
  
- **Dr. Salman Alim Marvasti**  
**Email:** technoorconsulting@googlemail.com  
**Email:** salman\_marvasti@yahoo.co.uk