

# Amirhossein Ghafari

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## RESEARCH INTEREST

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- Computer Networks
- Privacy Preserving Networked Systems
- Online Social Networks
- Data Sciences and Big Data Analysis

## EDUCATION

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- 2013–Present | B.Sc in Computer Software Engineering, [School of Electrical and Computer Engineering, University of Tehran](#), Tehran, Iran  
LAST YEAR'S GPA: 18.46/20 (3.9/4) - LAST TWO YEARS' GPA: 16.99/20 (3.5/4) - GPA: 16.24/20 (3.3/4)
- 2009–2013 | Diploma in Physics and Mathematics Discipline, Rouzbeh Cultural and Educational Institute, Tehran, Iran  
GPA: 19.73/20

## HONORS AND AWARDS

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- Sep. 2017 | **Finalist for the Best Undergraduate Project Award**  
BSc thesis project awarded by [School of Electrical and Computer Engineering University of Tehran, Tehran, Iran](#) - [certificate](#)
- Sep. 2017 | **Best Undergraduate Project Award**  
BSc thesis project awarded by [Cognitive Sciences and Technologies Council University of Tehran, Tehran, Iran](#)
- Feb. 2016 | **Ranked 6<sup>th</sup> in NSEC Capture The Flag(CTF)**  
[Isfahan University of Technology, Isfahan, Iran](#)
- Feb. 2015 | **Ranked 3<sup>rd</sup> in UTSEC CTF**  
[University of Tehran, Tehran, Iran](#)
- Apr. 2014 | **Ranked 1<sup>st</sup> in XP Games Contest**  
A contest that simulates [planning game](#) and its most difficult concepts in an extreme programming (XP) project  
[University of Tehran, Tehran, Iran](#)
- May 2014 | **Best Project Award**  
Final course project for Advanced Programming  
awarded by [IEEE Student Branch, University of Tehran, Tehran, Iran](#)
- Nov. 2013 | **Ranked 3<sup>rd</sup> in Ants Artificial Intelligence Challenge**  
[University of Tehran, Tehran, Iran](#)
- 2013 | **Top 0.15% of the nationwide university entrance exam, among more than 250,000 students**  
[Ministry of Science, Research, and Technology, Tehran, Iran](#)

## RESEARCH EXPERIENCE

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- 2017–PRESENT | Research Assistant at [Data Science Lab](#)  
Developing an Instagram crawler and analytics engine.  
Developing productivity bots for Telegram messaging service.  
Training junior undergraduate students as an internship mentor.  
*Under supervision of [Prof. Bahrak](#)*
- 2016–2017 | Research Assistant at [Dependable and Real-Time Systems Lab](#)  
Implemented a real-time stress detector system for autism children using bluetooth low energy(BLE) to collect output of [galvanic skin response sensor](#) and [pulse sensor](#)  
*Under supervision of [Prof. Kargahi](#)*

- SUMMER 2016 | Research Assistant at [Intelligent Information Systems Lab](#)  
 Created a news dataset by crawling top news websites such as [Yahoo! News](#), [HuffingtonPost](#), [CNN](#), [New York Times](#), [The Guardian](#), [LA Times](#) and implemented news category detection by supervised classification methods based on [Category Classification and Topic Discovery of Japanese and English News Articles](#)  
*Under supervision of Prof. Shakeri*
- 2015–2016 | Research Assistant at [Intelligent Information Systems Lab](#)  
 Created a custom data range tweets dataset by crawling Twitter and comparing search engines (google, yahoo, bing) performance by linking tweets to their top result of real events in the same date range.  
*Under supervision of Prof. Shakeri*
- FALL 2015 | Research Assistant at Institute for Research in Fundamental Sciences  
 Worked on the problem of minimizing the CPU time-span subject to power consumption constraint using integer linear programming.  
*Under supervision of Prof. Khonsari*

## WORK EXPERIENCE

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- 2017-Present | Developer at [TAP30](#)  
 Tap30 is a private-cab e-hailing platform providing standard and premium logistics services to companies and individuals.
- 2013-Present | Sysadmin and Webmaster  
 New grading website for elementary school - [Cities XXL](#), [Minecraft](#)  
*Rouzbeh Cultural and Educational Institute*
- 2015 | Designer and Developer  
 Ubuntu 15.04 festival registration website  
*ACM Student Chapter, University of Tehran*
- 2014-2015 | Front-end developer of [VAHED](#)  
 A virtual course selection website to help students in their real course selection  
*ACM Student Chapter, University of Tehran*
- 2014 | Designer and Developer  
[MINIFEET](#), AI contest platform  
*ACM Student Chapter, University of Tehran*
- 2013-2015 | Graphic Designer  
*ACM Student Chapter, University of Tehran*

## TEACHING EXPERIENCE

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- SPRING 2018 | **Internet Engineering**  
 Teaching Assistant - designing CAs, grading  
*Prof. Khosravi, University of Tehran*
- 2014-2017 | **Computer Programming**  
 Elementry School Instructor - Teaching [Minecraft](#), [MIT scratch](#) and [MSW LOGO](#)  
*Rouzbeh Cultural and Educational Institute*
- FALL 2017 | **Network Security**  
 Teaching Assistant - designing CAs, grading  
*Prof. Bahrak, University of Tehran*
- FALL 2017 | **Advanced Software Engineering**  
 Teaching Assistant - designing CAs, grading  
*Prof. Khosravi, University of Tehran*
- SPRING 2017 | **Software Engineering**  
 Head Teaching Assistant - designing CAs, grading, scheduling, holding recitation classes  
*Prof. Ghasemi, University of Tehran*
- SPRING 2017 | **Operating systems**  
 Teaching Assistant - designing CA, grading  
*Prof. Kargahi, University of Tehran*
- SPRING 2017 | **Cyber physical systems**  
 Teaching Assistant - project mentor, holding recitation classes  
*Prof. Kargahi, University of Tehran*
- FALL 2016 | **Design and Implementation of Compilers**  
 Head Teaching Assistant - designing homeworks and quizzes, grading, scheduling, holding recitation classes  
*Prof. Ghasemi, University of Tehran*

SPRING 2016	<b>Artificial Intelligence</b> Teaching Assistant - designing homeworks and computer assignments, grading <i>Prof. Asadpour, University of Tehran</i>
SUMMER 2014	<b>Adobe Photoshop</b> <i>ACM Student Chapter, University of Tehran</i>

## SKILLS

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- PROGRAMMING LANGUAGES
  - PROFICIENT: python, C/C++
  - FAMILIAR: ruby, bash,  $\text{\LaTeX}$ , sql, php, javascript, verilog, java, C#
- TOOLS AND FRAMEWORKS
  - FAMILIAR: React, Redux, Flux, Ruby on Rails, scrapy, Bootstrap, Apache Lucene, wordpress, joomla, angularJS

## SELECTED PROJECTS

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SPRING 2017	<b>Ticketi</b> A flight ticket booking website written in java <i>Advisor: Prof. Khames-panah - Internet Engineering</i>
SPRING 2017	<b>Crawling Persian dictionary</b> Crawling two most famous Persian dictionary using scrapy dataset and crawler available at <a href="#">my github repository</a>
FALL 2016	<b>Crawling 9GAG usernames</b> Crawling most active usernames based on commenting on hot section using scrapy
FALL 2015	<b>Compiler for MOL(Object-Oriented Language)</b> A modular programming language compiler for MIPS - written in Anltr4 and Java <i>Advisor: Prof. Ghassemi - Design and Implementation of Compilers</i>
FALL 2015	<b>Implementing new policy for Linux scheduler</b> A Custom RR scheduler on users rather than tasks - Linux kernel 2.6. <i>Advisor: Prof. Kargahi - Operating Systems Lab</i>
SPRING 2014	<b>Navigator</b> A navigation application on Tehran map using A* and Quadtree - Python. <i>Advisor: Prof. Faili - Data Structure</i>
FALL 2014	<b>Instagholam</b> A photo sharing social network inspired by Instagram - using C++/Qt <i>Advisor: Prof. Khosravi - Advanced Programming</i>

## LANGUAGE SKILLS

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- ENGLISH: Fluent  
IELTS: 7.5 (Listening: 8.5 - Reading: 8 - Writing: 6.5 - Speaking: 7)
- PERSIAN: Native

## EXTRACURRICULAR ACTIVITIES AND HOBBIES

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- Calligraphy
- Watercolor Painting
- Archery
- Swimming (certified lifeguard)