

# Hamed Moasses

Gender: Male  
Birth Date: March 4<sup>th</sup>, 1991  
Birth Place: Sanandaj, Iran  
Marital Status: Single

## Contact

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## Education

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- 2016 - 2020** **M.Sc. in Software Engineering**  
*Department of Engineering, Sanandaj Branch, Islamic Azad University, Iran* (Ranked 2<sup>nd</sup> among Iranian universities , reported by [U.S News](#) )  
**GPA:** 18.21/20 (A)  
**Thesis:** Improvement of Power Consumption in IoT Networks-Using Heterogeneous Clustering in Energy  
**Advisor:** Prof. Dr. Abdulbaghi Ghaderzadeh  
**Thesis Grade:** 18 out of 20
- 2013 - 2016** **B.Sc. in Software Engineering**  
*Department of Engineering, Sanandaj Branch , Islamic Azad University, Iran* (Ranked 2<sup>nd</sup> among Iranian universities , reported by [U.S News](#))  
**GPA:** 15.78/20 (B)  
**Thesis:** Implemented a Remote Home Monitoring and Control using Raspberry Pi  
**Advisor:** Prof. Dr. Keyhan Khamforoosh  
**Thesis Grade:** 20 out of 20
- 2009 - 2012** **Continuous Associate (Post High School) in Computer Software**  
*Department of Engineering, Sanandaj Institute of Technology (Shahid Yazdanpanah), Iran*  
**GPA:** 12.10 / 20 (C)  
**Thesis:** Developed a Real Estate Online System, Using C#.NET  
**Advisor:** Eng. Farzin Younesi

## Research Interests

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- Internet of Things
- Machine Learning
- 5G / 6G Networks
- Low-Power Networks
- Edge Computing
- Distributed Systems
- Wireless Communications
- Optimization Algorithms

## Selected Courses Grades

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- M.Sc.** Advanced Computer Networks: 20/20 (A+)  
Cloud Computing: 20/20 (A+)  
Seminar: 20/20 (A+)  
Advanced Algorithms: 17/20 (B+)  
Advanced Software Engineering: 19/20 (A)

- B.Sc.** Software engineering: 20/20 (A+)  
Internet Engineering: 17/20 (B+)  
Artificial Intelligence: 17/20 (B+)  
Engineering Mathematics: 18/20 (B+)

## Publications

- Moasses, H., Khamforoosh, K. (2021). A Reinforcement Learning Approach to Optimize IoT Compuation Offloading (under preparation)
- Moasses, H., Ghaderzadeh, A., Khamforoosh, K. (2021). HetEng: A Distributed Energy-Efficient Clustering Scheme for Heterogeneous IoT Networks. (*Accepted and presented in the IEEE International Conference (IAICT2021)*), [arXiv Preprint](#)
- Moasses, H., Improvement of Power Consumption in IoT Networks-Using Heterogeneous Clustering in Energy., *IAU, Sanandaj branch, Feb 2020, M.Sc Thesis (in Persian)*

## Teaching Assistantship Experience

<i>Spring 2020</i>	Advanced Computer Networks (Implementation & Simulation in MATLAB for Clustering) – <i>M.Sc Level, IAU, Sanandaj branch</i> – online.
<i>Spring 2020</i>	Computer Networks Lab – <i>M.Sc Level, IAU, Sanandaj branch</i> – online.
<i>Spring 2020</i>	Computer Networks – <i>B.Sc Level, IAU Sanandaj branch</i> – online.
<i>Spring 2018</i>	Cloud Computing (Emerging trends, open research areas, opportunities and challenges, Simulation of Fog Computing, <i>M.Sc Level, IAU , Sanandaj Branch , Iran</i> ).
<i>Spring 2017</i>	Cloud Computing (CloudSim in Java to implement cloud scenarios), <i>M.Sc Level, IAU, Sanandaj branch, Iran</i> .
<i>Fall 2017</i>	Basics of Programming And Computer, <i>B.Sc level, IAU , Sanandaj Branch , Iran</i> .

## Industry Experience

<i>2017- Present</i>	Java Backend and Android Developer in <a href="#">TDA team</a> located in <a href="#">Science and Technology Park of Kurdistan</a> .
<i>2015-2016</i>	System and Network technician , <a href="#">Ahoora (Zhin) Technical Co</a> , Iran.
<i>2015-2015</i>	Internship (System and Network technician), <i>Farasystem Co, Sanandaj, Iran</i> .
<i>2014-2015</i>	Network installation and Configuration, <i>Diabetic Society of Kurdistan, Iran</i> (Voluntary)

## Projects

- Simulated a Smart-Home with focusing on gas leakage detection system, MATLAB, Apr 2020-present
- Implemented and Simulated HetEng-Smart-BEEM with added 5G stack protocol, MATLAB, *IAU, Sanandaj branch, Sep 2019* (Part of the Master Thesis Project).
- Data Mining on a store's collected dataset, using Dataiku Tool, Hochschule Hannover, Germany
- Simulated Smart-BEEM, BEEM, BEE, HEED, LEACH protocols by 5 communication interfaces, using MATLAB, *IAU, Sanandaj branch, Feb 2019* (Part of the Master Thesis Project).
- Implemented Analyze dynamic behavior in controlling internet congestion modeling, MATLAB, *IAU, Sanandaj branch, Advanced Networks, Apr 2018*.
- Implemented and Programmed Smart-Home sensors, C++, Arduino, *UoK, IoT Lab, Oct 2018*.
- Implemented meta-heuristic algorithms (Genetic, PSO, Ant colony) using MATLAB, *IAU, Sanandaj branch, Advanced Algorithms, fall 2017*.
- Developed a Client-Server Android application (Language Learning App), JAVA, *TDA team, 2017*.
- Implemented ML and Data Mining techniques on skin cancer dataset, using WEKA lib, JAVA, *IAU*

## Attended Seminar and Workshops

<i>July2021</i>	The 2021 IEEE International Conference on Industry 4.0, Artificial Intelligence and Communications Technology (IAICT) - 27-28 July - Indonesia.
<i>Aug 2019</i>	Summer School - Digital Transformation and Impacts on Economy and Society - 6 ECTS – Hochschule Hannover, Germany.
<i>Apr 2019</i>	4 <sup>th</sup> International Conference of Natural Sciences (ICNS2019) – Mathematic & Computer, <a href="#">University of Kurdistan, (UoK)</a> , Iran.
<i>Mar 2019</i>	Workshop of "Internet of Things Communications and Protocols (advanced)", <a href="#">IoT Lab</a> , UoK.
<i>Nov 2018</i>	Workshop of "Internet of Things basics and implementation using Arduino", IoT Lab, UoK.
<i>Oct 2017</i>	Workshop of "Applied Machine Learning", Science and Technology Park of Kurdistan, Iran.

## Technical Skills

- **Languages:** Java, C/C++, Python, C#, SQL, HTML& CSS, JavaScript, Node.js
- **Platforms:** Linux, Windows, Android, Raspbian
- **Frameworks:** Apache Maven, SpringBoot, Angular
- **Database:** PostgreSQL, SQLite
- **Scientific:** MATLAB, Python, Weka, CloudSim, Dataiku
- **Professional:** Microsoft Office, L<sup>A</sup>T<sub>E</sub>X
- **Tools:** IntelliJ IDEA, Android Studio, Eclipse IDE, Netbeans IDE, SQL Server Management Studio, Git, Arduino, Packet Tracer
- **Other:** Multithreaded and Parallel Programming, Micro services, Unit Testing and Test Driven Development
- **Hardware platforms:** Raspberry Pi, Arduino

## Memberships

- 2019-present Young Researchers and Elite Club (YREC)
- 2018-present Member of IEEE
- 2018- present Member of IEEE Young professionals, IEEE Internet of Things Community
- 2019-present Member of IEEE Sensor Council

## Honors and Awards

- 2020 Master Thesis defend with evaluation of "Very Good (A)".
- 2019 Received a full DAAD travel grant for attending the summer school, HsH, Hannover, Germany
- 2018 Ranked within the **Top 15%** among SE Students in M.Sc. IAU, Sanandaj Branch, Iran.
- 2016 Ranked **116<sup>th</sup>**/15000+ CS students, nationwide Azad university entrance exam for M.Sc. level
- 2016 Ranked **3<sup>rd</sup>**/20+ among SE Students in B.Sc. IAU, Sanandaj Branch, Iran.
- 2015 Silver medalist in regional swimming championships among Kurdistan province universities.
- 2011 Top Athlete award of the Institute, Shahid Yazdanpanah, *Technical and Vocational University*.
- 2010 Silver medalist in national swimming championships among all national institutes of technology.

## Languages

- Kurdish: Mother tongue
- Persian: Native
  - English: Fluent
  - German: A1 (approx)

## Sport Certifications & Hobbies

- Swimming Coach certified
  - International Life Saving certified (ILS)
  - Swimming referee certified
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| Swimming   | Mountaineering |
| Meditation | Running        |
| Chess      | Hiking         |

## References

**Prof. Dr. Abdulbaghi Ghaderzadeh**  
Assistant Professor,  
Department of Computer  
Engineering, Islamic Azad  
University, Sanandaj branch, Iran.  
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Professor,  
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