

# Hamed Moasses

## Contact

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

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## Education

### M.Sc. in Software Engineering

2016 - 2020  
*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 Energy Consumption in IoT Networks-Using Heterogeneous Clustering in Energy  
**Advisor:** Prof. Dr. Abdulbaghi Ghaderzadeh  
**Thesis Grade:** 18 out of 20

### B.Sc. in Software Engineering

2014 - 2016  
*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. Amir Sheikahmadi  
**Thesis Grade:** 20 out of 20

### Continuous Associate (Post High School) in Computer Software

2009 - 2012  
*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

- Internet of Things
- Artificial Intelligence
- 5G Networks
- Applied Machine learning
- Connected-Intelligent Systems
- Distributed Systems
- Wireless Communications
- Optimization Algorithms

## Selected Courses Grades

**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+)

## 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.
- Developed a Client-Server Android application (Stokala, a shopping App), JAVA, TDA team, 2017.
- 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

## Teaching Assistantship Experience

|             |   |
|-------------|---|
| Spring 2020 | Advanced Computer Networks (Implementation & Simulation in MATLAB for Clustering) – M.Sc Level, IAU, Sanandaj branch – online.                            |
| Spring 2020 | Computer Networks Lab – M.Sc Level, IAU, Sanandaj branch – online.  |
| Spring 2020 | Computer Networks – B.Sc Level, IAU Sanandaj branch – online.   |
| Winter 2019 | Java Core and Spring-Boot framework – private tutor.  |
| Spring 2018 | Cloud Computing (Emerging trends, open research areas, opportunities and challenges, Simulation of Fog Computing, M.Sc Level, IAU, Sanandaj Branch, Iran. |
| Spring 2017 | Cloud Computing (CloudSim in Java to implement cloud scenarios), M.Sc Level, IAU, Sanandaj branch, Iran.  |
| Fall 2017   | Basics of Programming And Computer, B.Sc level, IAU, Sanandaj Branch, Iran.   |

## Publications

Moasses, H., Ghaderzadeh, A., Khamforoosh, K. (2021). HetEng: A Distributed Energy-Efficient Clustering Scheme for Heterogeneous IoT Networks. (*Submitted in the 2021 IEEE International Conference (IAICT2021)*)

Moasses, H., Improvement of Energy Consumption in IoT Networks-Using Heterogeneous Clustering in Energy., IAU, Sanandaj branch, Feb 2020, M.Sc Thesis (in Persian and English).

## Industry Experience

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

## Attended Seminar and Workshops

|          |  |
|----------|--|
| Aug 2019 | Summer School - Digital Transformation and Impacts on Economy and Society - 6 ECTS – Hochschule Hannover, Germany.                                     |
| Apr 2019 | 4 <sup>th</sup> International Conference of Natural Sciences (ICNS2019) – Mathematic & Computer, <a href="#">University of Kurdistan, (UoK)</a> , Iran |
| Mar 2019 | Workshop of "Internet of Things Communications and Protocols (advanced), <a href="#">IoT Lab</a> , UoK.  |
| Nov 2018 | Workshop of "Internet of Things basics and implementation using Arduino", IoT Lab, UoK.  |
| Apr 2018 | Webinar of "Fog Computing and IoT solution Architecture, Eclipse IoFog", Kilton Hopkins.   |
| Oct 2017 | Technical workshop of "Applied Machine Learning"(Science and Technology Park of Kurdistan.   |
| Sep 2017 | Workshop of "Advanced Java: Backend-Android", Science and Technology Park of Kurdistan.  |

## 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 Excellence.  |
| 2019 | Received a full DAAD travel grant for attending the summer school, HsH, Hannover, Germany                    |
| 2018 | Ranked within the <b>Top 15%</b> among SE Students in M.Sc. IAU, Sanandaj Branch, Iran.                      |
| 2016 | Ranked <b>116<sup>th</sup></b> /15000+ CS students, nationwide Azad university entrance exam for M.Sc. level |
| 2016 | Ranked <b>3<sup>rd</sup></b> /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, <i>Technical and Vocational University</i> .         |
| 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                  | Swimming   | Mountaineering   |
| • International Life Saving certified (ILS) | Meditation | Running          |
| • Swimming referee certified                | Chess      | Nature exploring |

## References

### Prof. Dr. Abdulbaghi Ghaderzadeh

Assistant Professor,  
Department of Computer Engineering, Islamic Azad University, Sanandaj branch, Iran.  
[B.Ghaderzadeh@iausdj.ac.ir](mailto:B.Ghaderzadeh@iausdj.ac.ir)  
[Google Scholar](#)

### Prof. Dr. Dagmar Mack,

Professor,  
Department of Business Informatics, Hochschule Hannover, University of Applied Science and Arts, Germany  
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### Prof. Dr. Keyhan Khamforoosh

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