

Hussein Marah

Researcher — Computer Scientist



I'm an ambitious and highly motivated researcher and computer scientist. My interests include modelling, designing, and developing intelligent and complex systems. My fondness for technology led me to this path. However, as a mature person, my prime motivation is leveraging the knowledge and experience I gained through the years to turn technology into useful tools and positively impact society.

Work experience

Present

Oct. 2021

Computer Science Researcher

University of Antwerp - Flanders Make, Belgium

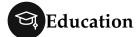
- Research, conceptualize and design autonomous intelligent systems
- Lead the implementation of concepts into functional systems.
- Evaluate the results and the artefacts with real-world cases.
- Documentation, reporting and writing papers.

Sep. 2021

↑ Nov. 2020 **Computer Science Researcher**

Johannes Kepler University Linz, Austria

- Investigated the modelling and engineering of real-time systems.
- Designed and developed software for pattern detection.



present ↑ Oct. 2021

nt 💮

PhD in Computer Science

University of Antwerp, Belgium

Courses and Achievements:

- Mastered advanced techniques for modelling, simulation and engineering intelligent and complex systems.
- Trained extensively to realize ideas into implementations.
- Gained a wide range and valuable set of transferable skills.
- Proficient in several modelling and engineering approaches and tools.
- Wrote several papers submitted to different journals.
- Participated in various conferences and events.
- Gave many presentations, demos and showcases for many deliveries

Jul. 2020 (

↑ Sep. 2017 M.Sc. in Information Technology

Ege University, Turkey

Courses and Achievements:

- Took several advanced courses in computer science and algorithms.
- Completed the implementation of a functional code generation software for sensor devices.
- Successfully defended the thesis and received the second-best paper from a decent journal in the field.



Contact

Email

hussein.marah@gmail.com

Phone

+32 499 475612

.. Address

Antwerp, Belgium

Website

/husseinmarah

Linkedin

/husseinmarah

Github

/husseinmarah



Honors & Awards

Journal of Computer

• Languages 2021

Best Paper Award Runner-Up

Türkiye Scholarships

 Master Degree Scholarship 2016

Libyan Innovation Prize

Finalist Nominations 2014

Almadar Aljadid Company

Industrial Research Fund 2013



Languages

English AdvancedArabic NativeDutch Basic

• Turkish Intermediate



2021 Modelling and Engineering Intelligent Digital Twins.

Continuing the research on the modelling and engineering of intelligent cognitive agent-based digital twins.

2020 Runtime monitoring for Cyber-physical Systems.

Conducted research on developing a runtime monitoring framework for cyber-physical systems and robotics.

2018 Model-driven development for Embedded Systems and IoT Sensors.

Developed a framework for roundtrip engineering for modelling and code generation of embedded systems of wireless sensor networks.

2013 Fraud detection in Almadar Aljadid Company for telecommunication.

Investigated fraud problems in international calls through the company's network. Conducted research, then designed and developed a software solution that has been tested using real datasets provided by the company.

Extracurricular

Summer Schools:

- KBC Winter School 13 & 14 December.
- Summer School on Cyber-Physical Systems and Internet of Things (SS-CPSIoT'2022)
- 8th International Summer School on Industrial Agents (ISSIA) (2022)

Academic Activities:

- Member of the IEEE-IES Technical Committee on Industrial Agents (TC-IA).
- Reviewer in several high-impact journals: Simulation Modelling Practice and Theory (Elsevier) - 2023, IEEE Transactions on Industrial Informatics Journal - 2023, Journal of Computer Languages (Elsevier) - 2022, International Journal on Artificial Intelligence Tools - 2019.
- Organizing Staff member of the 3rd International Students Science Congress 2018, Izmir, Turkey.

Talks and Presentations:

- Tutorial, Flanders Make Scientific Conference, Kortrijk, 26 March Belgium, 2024.
- Showcase Demo, Flanders Make Robotics Demo Day, Leuven, Belgium, 14 September 2023.
- Tutorial, Flanders Make Scientific Conference, Antwerp, Belgium, 29 March 2023.
- Invited Talk, Ege University, International Computer Institute, Izmir, 01 June 2023.

Informal Learning and International Experiences:

- Digital Camps on Germany 2015 & 2016.
- Erasmus and youth exchanges on Latvia 2019, Slovenia 2021, Czech Republic 2021, Spain 2023.

Personal-Skills

- Critical Thinker
- Teamwork
- Collaboration
- Problem-Solver
- Flexible and Adaptable
- Effective Communication

Professional-Skills

- Systems Development and Engineering
- Programming Languages
- Modelling and Simulation
- Data Science
- AI & Machine Learning
- Robotics and IoT

1 Hobbies

- Running
- Hiking
- Swimming and Spearfishing