

Artificial Intelligence  
in a Special Interview



Qatar University students have made significant strides in the field of Artificial Intelligence (AI), as the university provides an advanced educational environment characterized by high professional standards that contribute to producing exceptional graduates aligned with the demands of the job market and scientific and professional development. Here, we meet Jeham Helal Al-Kuwari, a student in the Computer Engineering and Science program at the College of Engineering at Qatar University, to shed light on his experience in this field.



# Interview with: Jeham Helal Al-Kuwari

Department of Computer  
Engineering and Science, College of  
Engineering - Qatar University

## **Jeham, how do you introduce yourself to the readers of Qatar University Research Magazine?**

I am Jeham Helal Al-Kuwari, a student in the Department of Computer Engineering and Science at the College of Engineering, Qatar University. My passion for technology started at a young age when I enjoyed understanding how the electronic devices around me worked. As I progressed in my studies, I discovered that AI is not just a future technology, but a transformative force capable of improving people's lives and solving complex problems in innovative ways.

I found in this field a platform to achieve my ambitions and apply my skills in developing smart solutions that serve society and enhance the quality of life. I aspire to contribute to making modern technologies more inclusive and sustainable, and to be part of the transformation taking place in the upcoming industrial revolution. For me, AI is not just an academic discipline, but a passion that drives me to explore new horizons and work on projects that make a tangible positive impact.

## **As an engineering student, what attracts you to the applications of artificial intelligence? And has it become a part of the university student's journey?**

What attracts me to AI applications is their remarkable ability to solve complex problems in innovative and creative ways that go beyond traditional solutions. I am fascinated by the ability of intelligent systems to learn from data and analyze it with high precision, which opens up vast possibilities in various fields—from improving healthcare in medicine, to enhancing productivity in agriculture, to exploring space and dealing with uninhabited environments.

For university students, AI has become an essential and influential element in our academic and professional development, as it has become an integral part of curricula and research projects that contribute to developing our skills. We learn how to design algorithms, build smart models, and analyze data in advanced ways, which makes us more prepared to face the challenges of the future. AI not only provides tools for solving problems, but also opens up avenues for creativity and innovation in all aspects of life.

## **We know that your graduation project is related to artificial intelligence. Could you tell us more about it?**

My project aims to develop a drone that uses AI to improve responses to natural disasters and major accidents. The drone relies on a computer vision system and deep learning techniques to analyze images and data captured during search and rescue operations.

The drone works by identifying the locations of victims trapped under rubble using advanced radar sensors that rely on wireless wave reflection and high-definition images. The AI model analyzes the data to determine whether a human presence is detected, and the result, along with the location, then it is sent in real time to rescue teams via 5G networks, which accelerates the decision-making process.

The goal of the project is to reduce response time and improve the efficiency of rescue operations, contributing to saving lives and reducing human risks during disasters. The drone offers an innovative solution that combines speed and accuracy to serve rescue teams and affected communities.

## **Do you expect the debris detection drone to gain popularity in industrial use?**

Yes, I expect the drone to gain significant popularity in disaster management due to its ability to quickly and accurately identify the locations of victims trapped under rubble. This technology is a revolution in emergency response, as it helps reduce human risks and accelerates rescue operations, making it an indispensable tool.

With the use of AI techniques and advanced sensors, the drone provides high accuracy in collecting and analyzing data, which improves the efficiency of rescue teams and their decision-making in the field. With support from governments and humanitarian organizations, this drone could become an integral part of emergency management plans both locally and internationally.

The global desire to improve efficiency and reduce response time, coupled with the need for innovative solutions that minimize human risks, makes this technology an attractive and future-oriented option. The drone is not just a technical tool; it is a practical model for automating vital operations and could contribute to changing how we handle natural disasters and major accidents in the near future.

## **In your opinion, what are the main advantages and disadvantages of artificial intelligence?**

AI is characterized by its ability to improve efficiency and productivity across various fields. It provides innovative solutions and reduces human errors, making processes more accurate. AI contributes to the development of advanced services such as medical diagnostics and smart education.

However, it faces challenges such as job loss due to automation and privacy concerns. AI can also exhibit biases if not trained properly. Additionally, complete reliance on AI could lead to significant problems in the event of technical failures.

**What do you think about the University's efforts in supporting artificial intelligence and its role in encouraging students to achieve excellence and creativity?**

Qatar University is making outstanding efforts in supporting AI, starting from updated curricula that align with the latest technologies, to research projects that encourage students to be creative and innovative. The labs equipped with the latest technological tools, in addition to collaborations with leading global institutions, offer students unique opportunities to develop their skills and keep up with the rapid advancements in this field.

The University also ensures the hosting of high-level AI competitions and conferences, giving students the chance to present their ideas to global experts. Furthermore, the University provides workshops and practical training programs that help prepare students to be ready for the job market and future requirements, with a focus on innovation and creativity.

**Tell us about your future plans and what you aspire to achieve in this field?**

In the future, I aspire to work in the field of AI, applying the skills I've gained at the University to projects or tasks that serve the community and enhance efficiency in vital areas. My goal is to improve the use of smart technologies in our daily lives, such as developing tools to facilitate disaster response or enhance the quality of services in education, healthcare, and transportation.

I also aim to continue developing myself through lifelong learning and working in areas that deepen my knowledge of AI and its advanced techniques. I focus on creating innovative and simple solutions that address real needs and make technologies more accessible and usable for everyone. My ultimate goal is to leave a tangible impact by using these technologies to contribute to technological progress and society, helping to create a better and more sustainable future.

