

HES - Volunteering Program Verification Form

This form is to be used to document volunteering hours. If a student volunteers for multiple organizations, a separate form must be used for each organization. **This form must be turned in by the 28th of each month, the latest.**

I certify that the scholar Mahdi Faraj completed a total of 10 hours of service at InnovaThrive.

The hours were completed hours as per the below:

Hours # 3 (date) _2/12 – 6/12_ (initials of supervisor) __A.K. __

Hours # 3 (date) _9/12 – 13/12_ (initials of supervisor) __A.K. __

Hours # 3 date) _16/12 – 20/12 (initials of supervisor) __A.K. __

Hours # 1 date) _23/12 - 27/12 (initials of supervisor) __A.K. __

Brief description of the activities the scholar performed or participated in:

November Task: Blockchain in Smart Energy Trading Platforms

In November, my research focused on the use of blockchain technology to create decentralized energy markets for peer-to-peer trading. Key technologies explored include smart contracts for automating energy transactions and blockchain for tracking renewable energy credits. These innovations enable localized energy trading, such as between households with solar panels, and ensure the verification of green energy sources in global markets.

Pilot programs have shown that blockchain platforms can reduce energy costs by 20%, demonstrating their potential to improve energy efficiency. The advantages of blockchain in this context include empowering consumers to control their energy usage and encouraging the adoption of renewable energy sources. However, the complexity of integrating blockchain with existing energy grids remains a challenge.

Future research should explore combining blockchain with AI for real-time energy optimization and expanding smart grids to rural areas, which could help make energy trading more efficient and accessible.

December Task: AI in Enhancing Emergency Medical Response Systems

In December, my research focused on the role of AI in optimizing emergency healthcare services.

Key technologies include AI for triaging emergency calls and predictive analytics for ambulance routing. These technologies help reduce response times for critical patients and automate diagnostics during transport, ensuring faster and more accurate care.

Statistics show that AI-driven systems can improve survival rates by 15% in urban emergencies, indicating the significant potential of AI in emergency medical response. The advantages include faster, more accurate responses to emergencies and reduced workload for medical staff. However, risks such as algorithmic errors in life-critical decisions were also noted.

One of the main challenges is ensuring equitable access to AI-enhanced systems across different regions and healthcare facilities. Future research should focus on integrating AI with telemedicine for remote diagnoses and using AI to predict emergency healthcare needs based on demographic data, further improving preparedness and response.

Written feedback about the scholar's performance:

Mahdi's research on blockchain in energy trading and AI in emergency medical response systems was thorough, exploring how these technologies can improve energy efficiency and healthcare outcomes. His future research directions were insightful.

Please rate the overall performance of the scholar at your organization:

	Mastery (5)	Proficient (3)	Emerging (1)
Problem solver	X		
Engaged & Committed	X		
Open-minded & multicultural	X		

Signature & stamp Andrew El Kahwaji

Printed Name Andrew El Kahwaji

Date 26/12/2024

Email andrew.lifesculptor.coo@gmail.com

Phone +961 71 914 378



CEO of InnovaThrive