

Stanford



Mahdi Al-Husseini

Masters Student in Aeronautics and Astronautics, admitted Winter 2021

Bio

BIO

Captain Mahdi Al-Husseini is the modernization director at the 25th Infantry Division and an active-duty HH60M helicopter pilot stationed at Wheeler Army Airfield, Hawaii. He is a graduate researcher at Stanford where he studies intelligent systems and human-autonomy teaming as applied to search and rescue, medical evacuation, and wildfire response. Mahdi is a registered patent agent, professional engineer, and inventor with more than 30 patents and patent applications, the majority of which have been acquired by the military and industry.

HONORS AND AWARDS

- Airbus Robert M. Leich Aviation Award (Unit), C/3-25 Aviation Regiment (2023)
- Google Gravity Games Autonomous Division (1st place), Georgia Tech (November 2021)
- Collegiate Invention Competition Finalist, Georgia Tech, Stanford University (2019, 2021)
- Major General Greene Individual Innovation Award, Army Futures Command (December 2021)

PATENTS

- Mahdi Al-Husseini. "United States Patent AMC-1 System and Method for Calculation and Display of Formation Flight Info on Augmented Reality Display"
- Mahdi Al-Husseini. "United States Collection, Processing, and Output of Flight Information Method, System, and Apparatus"
- Mahdi Al-Husseini. "United States Patent 12099337 Control moment gyroscope hoist stabilization system, method, and apparatus", Sep 24, 2024
- Mahdi Al-Husseini. "United States Patent 11613365 Electromagnetic device for an ejector-spring static line reserve parachute", US Army, May 28, 2023
- Mahdi Al-Husseini. "United States Patent 11535496 Device for stabilizing a hoisted object", Vita Inclinata Inc., Dec 27, 2022

Publications

PUBLICATIONS

- **Watercraft as Overwater Ambulance Exchange Points to Enhance Air Medical Evacuation.** *Air medical journal*
Al-Husseini, M., Wray, K. H., Kochenderfer, M. J.
2025; 44 (1): 23-29
- **Hierarchical Framework for Optimizing Wildfire Surveillance and Suppression Using Human-Autonomous Teaming** *Journal of Aerospace Information Systems*
Al-Husseini, M., Wray, K., Kochenderfer, M.
2024