DAF-MIT AIA

PHANTOM FELLOWSHIP

Program Description

Out of the shadows...bridging the digital divide

*Developing high-performing Air and Space professionals
into future leaders of artificial intelligence*

I.   Executive Summary

The Phantom Program offers a comprehensive fellowship opportunity that enables individuals to gain valuable knowledge from leading experts in the field of artificial intelligence. The program follows a highly rigorous selection process, ensuring that only top-tier personnel are accepted into the AI Accelerator. These successful candidates, referred to as Phantoms, will collaborate with the most distinguished AI researchers globally, working alongside both fellow Airmen and Guardians who oversee specific AI projects. Phantoms will be responsible for contributing their specialized knowledge and expertise to a range of projects, while also innovating and developing novel processes to facilitate the successful integration of AI research into practical application. Throughout the course of the five-month[1] program, Phantoms will be exposed to cutting-edge AI research, real-world implementable solutions, customized AI training, and a distinctive career-enhancing experience.
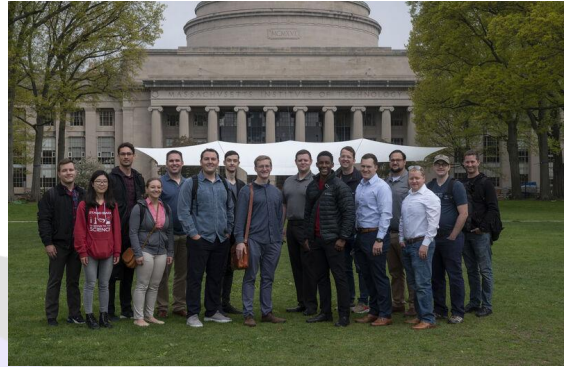
II. Training

The Phantom program serves a dual purpose. Firstly, participants in the program will enhance their AI knowledge and skills by engaging in a customized educational curriculum that aligns with their individual abilities and career goals. Secondly, Phantoms will actively contribute to AI projects while also providing input into acquisition policies and procedures, with the aim of expediting the Department of Defense's procurement of ethical and advantageous AI technologies. The AIA is renowned for its expertise in AI training and collaborates closely with various stakeholders to offer access to cutting-edge training materials from the industry. As a Phantom, individuals will have the privilege of immersing themselves in world-leading AI research and gaining hands-on experience with research projects and practical applications.

III. Career Enhancements & Expectations

The program offers valuable benefits to professionals in the air and space industry, focusing on education and career broadening. Individuals accepted into the AIA will have the opportunity to closely collaborate with the world's leading AI researchers as well as airmen who specialize in operations, thus gaining invaluable experience. Upon completion of the program, participants will have access to Special Experience Identifiers (SEIs), allowing the Department of Defense to leverage the knowledge and skills acquired through the program later in their careers. Notably, outstanding performance in the program may warrant recognition and decorations from the leadership of the AIA.

As they leave the AIA, Phantom alumni are charged with the task of promoting and educating others on the responsible and ethical application of AI in their respective domains. Having been identified by SEI as AI and Machine Learning experts, alumni are expected to leverage their expertise as AI/ML advocates, providing insight on capabilities and limitations in support of implementation at the unit level. The networking opportunities fostered during the program are instrumental to sustaining this endeavor and alumni should continue to utilize them.

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[1] Program duration is approximate and varies from cohort to cohort.

IV. Eligibility

The program is highly-selective and prioritizes candidates with a history of strong performance. Active duty O-1 to O-4 and E-3 to E-7, as well as their civilian equivalents, are welcome to apply[2]. Currently, non-technical Phantoms are sourced specifically from the career fields of 35P, 38F, 62E, 63A and 64P, along with their enlisted and civilian equivalents. On the other hand, Technical Phantoms are individuals with exceptional performance from any Air Force Specialty Code (AFSC), possessing specialized experience in programming, computer science, data science, and/or AI/ML. These candidates will be evaluated based on their experience and current alignment with AIA project requirements.

V.   Program Expectations

The AIA will provide Phantoms with meaningful exposure to AI projects and a firm foundation in AI technology. Additionally, Phantoms will be familiarized with standard practices within the field of AI research and procurement. These experiences, along with the professional network cultivated during their time at the AIA, will greatly enhance the Phantoms' AI education and enable them to effectively apply theoretical concepts into practical skills. For official purposes, the AIA will provide a Memorandum of Agreement (MOA) to the loaning unit, ensuring proper documentation of the Phantom program. The AIA will finance one of the three one-week temporary duty assignments (TDY), to the Massachusetts Institute of Technology (MIT) campus located in Cambridge, MA.
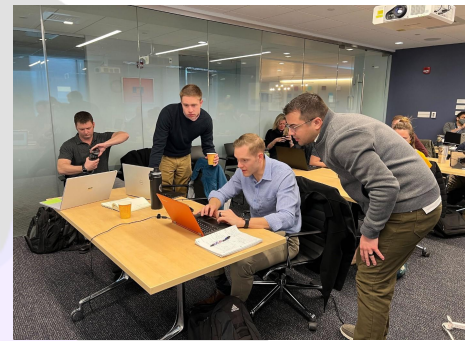
The loaning unit shall maintain administrative control (ADCON) over the Phantom while delegating day-to-day operational control (OPCON) to the AIA. Additionally, the loaning unit shall allocate funds to support a maximum of two one-week TDYs to MIT, enabling participation in AIA activities, conferences, and events. However, exceptions to this funding obligation may be considered on an individual basis.

Each Phantom should be prepared for a demanding work environment, capable of working independently, and able to thrive in a flexible and unstructured setting. A positive attitude and a willingness to pioneer new paths are essential qualities for a Phantom. The experience of each Phantom will vary based on the current needs of the AIA and their specific skill set. As the AIA operates in a culture similar to that of a startup, with a flat organizational structure and a flexible work environment, Phantoms must be self-motivated individuals who take the initiative and take ownership of their workload and schedules. They must also be comfortable working remotely and using their personal computers to handle the program's tasks. Phantoms are responsible for learning how to create change within both the accelerator and the DAF on a broader scale. Additionally, it is important for Phantoms to maintain open communication with the unit they are loaned to for any administrative matters. Overall, fellows must strive to contribute effectively to the organization's goals and objectives.

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[2] Rank requirements for PA phantoms specifically are O-2 to O-4 and E-5 to E-7; 35P/3N0/1035 ASFC is required.

VI. Responsibilities

Public Affairs (PA) Phantoms amplify key AI Accelerator narratives to DoD senior leaders and other strategic stakeholders, and publicize AI Accelerator events and accomplishments. The PA Phantom should have a solid foundation in strategic communications, technical writing, media engagement, social media, and information visualization. Primary responsibilities for PA Phantoms include developing and maintaining clear, consistent, and synchronized messaging on AIA narratives, engaging with AIA project staff to current on project status and upcoming milestones, and creating and releasing AIA informational products including videos, interviews, and news articles. Additionally, PA Phantoms assist the AIA with establishing a footprint at DoD conferences and events of interest, generate and maintain AIA relationships and engagements across media platforms, and own and maintain the aiaccelerator.af.mil website (Completion of AFPIMS training and an active AFPIMS account required). Finally, they train Phantom and AIA personnel on media and communications skills, as applicable.

Education Phantoms collaborate closely with the AIA's Chief Learning Officer (CLO) in order to tackle AI education initiatives. They are responsible for coordinating strategic recruitment and engagement efforts across the entire DAF organization for AIA/MIT courses, which encompass both asynchronous online programs and in-person workshops. Furthermore, they maintain regular communication with MIT researchers in order to gather valuable feedback and customize the content of these courses. Their role also includes providing research insights. Traditionally, Education Phantoms handle the recognition aspect of the fellowship, including the creation of Letters of Evaluation and the allocation of Special Experience Identifiers. They are also involved in supporting the CLO in managing multiple DAF AI SEIs. As such, Education Phantoms are generally sourced from the 38F/3F0 career fields.

Technical Phantoms support the AIA by bringing technical expertise and operational experience from their field to a range of roles within the various AIA projects. In essence, they are the conduit between operational requirement owners and the acquisition workforce for translating mission needs into actionable procurement. Technical Phantoms will have access to both standardized and tailored educational opportunities in order to obtain a deeper technical understanding of AI development and implementation, as well as other support skills needed for their roles as technical advisors to the various AIA projects that are operationalizing AI research for the warfighter. Technical Phantoms' roles will vary depending on the depth and nature of their expertise, including serving as hands-on coders, providing researchers with an operational perspective, and connecting developers and end-users so that DAF needs are met through intentional, human-centered designs based on an understanding of operational problem sets. Technical Phantoms also serve as a linkage between their home units and the AIA to advocate for greater understanding, adoption, and implementation of AI in their missions.

VII. Travel

There will be a total of three week-long TDYs throughout the duration of the five-month Phantom Program. The first TDY will occur during the initial week of the Phantom fellowship, while the last TDY will take place in the final weeks of the fellowship. Additionally, there will be another TDY arranged around the midpoint of the program. The AIA will cover the expenses for one TDY, typically the final TDY. The loaning unit will support two week-long TDYs, aimed at facilitating the ongoing AI project work and integration with AIA. These TDY arrangements will be outlined in a Memorandum of Agreement (MOA), which will be signed by both the AIA and

the loaning unit before the Phantom enters the program. Unless the Phantom is stationed in the local area, they will telework outside of the TDY weeks.

VIII.   Cadence

After acceptance, newly recruited Phantoms are required to complete foundational training, fulfill specific administrative tasks, and collaborate with AIA project personnel to facilitate the onboarding process. The program acceptance notification will grant them access to all necessary resources. Considering the brief duration of five months to ramp up and contribute effectively, it is essential that these Phantoms focus on accomplishing preparatory tasks in order to optimize their learning and development. Each Phantom will receive relevant resources and information to comprehend the projects they have been assigned to and are strongly encouraged to establish connections with their respective Phantom Sponsor and AIA research project liaisons prior to the program commencement.

The initial week will involve an in-person transition period where previous Phantoms and current AIA project leaders will provide comprehensive guidance. Additionally, there will be orientation events and activities designed to facilitate the Phantom's seamless integration into the AIA. In the subsequent weeks, Phantoms are required to fulfill any pending administrative tasks, continue with their basic training, and progressively become part of their selected AI projects. The daily tasks of each AI project will determine the nature of work for the Phantoms. By the end of the first month, Phantoms will be expected to identify a specific home unit problem to focus their individual research efforts on.

The majority of the work for the AI projects will take place during months two and three. The Phantoms will use their AI training and combine it with their specific expertise to support the projects in the most beneficial ways. To align with the AIA integration planning and the project timelines/milestones, a temporary duty assignment (TDY) will be arranged during this period. Additionally, Phantoms will begin developing a proposal for an impact paper topic, leveraging their newly acquired knowledge in AI to bring about meaningful change within their respective units. By the conclusion of month three, Phantoms will have their first evaluation meeting with AIA Leadership to discuss their proposal.

While actively progressing with the AI projects, the Phantoms will initiate the development and documentation of a transition plan for the subsequent Phantom cohort in the final month of the program. The closing weeks of the program will require each Phantom to submit their final impact paper, and the final week will entail a temporary duty assignment to Cambridge, MA for an in-person transfer of AI project responsibilities to the incoming Phantoms. Additionally, this week will encompass several program wrap-up activities.

IX. Application

In a scheduled solicitation cycle that happens approximately every 4-5 months, applicants are required to complete a Google form. This form includes information about their background, experience, motivation for applying, and responses to specific questions provided by AIA research projects that are accepting Phantom applications. If an applicant is competitive, they may be asked for additional career documentation. The entire process, from the initial solicitation to notification of successful candidates, takes around 6 weeks. It is important to note that the application is not binding, and once selected, individuals will have one week to accept the offer. Subsequently, they will undergo onboarding activities leading up to the official commencement of the program.