



PROFILE

Senior Aerospace Engineer
U.S. Air Force Research Laboratory

CITATION

Pioneering contributions in statistical optimal control theory, sustained leadership and strategic vision in game-theoretic operations research of military satellite communications, space control autonomy, and space domain awareness. Exceptional services to innovation ecosystem and coalition of government agencies, small business, and industry.



KHANH D. PHAM

Asian American Engineer of the Year

Dr. Khanh D. Pham is a senior aerospace engineer in the Geospace Technologies Division at the Air Force Research Laboratory (AFRL) Space Vehicles Directorate, where he serves as the Air Force's principal scientific authority and independent researcher in space control & command autonomy, space situational awareness, and assure satellite communications.

As an AFRL aerospace engineer, his engagements with the Air Force and the greater research community are substantial. Dr. Pham has brought systems-theoretic science, control engineering principles and game-theoretic operations research paradigms, together with teamwork and interdisciplinary research to solve the Air Force's top engineering problems and capability priorities. The impacts of his contributions have resulted in many national awards. In 2008, General Bruce Carlson, Commander of the Air Force Materiel Command, awarded him the prestigious Air Force Outstanding Engineer Award. In 2014, his peers honored him as a "Fellow of the Society of Photo-Optical and Instrumentation Engineers." In 2018, he was nominated by an Asian- American small business and won the "4th Annual Champion of Small Business Technology Commercialization Award." In 2018, he won the Society of Asian Scientist and Engineers of the Year (government category) award and in 2019 won in the Professional Achievement category. In 2020, Dr. Pham was the first Vietnamese American to be a Fellow of the AFRL, an honor given to only 0.2 percent of AFRL's 5,000 professional technical staff each year and is AFRL's highest award.

As an AFRL researcher, Dr. Pham's pioneering scientific contributions to the development of novel statistical optimal control and game-theoretical operations research for space domain awareness, space control autonomy and military satellite communications are well documented. He has published 29 journal articles, 26 chapters in books, 260+ conference proceedings, the sole author of 2 research monographs, and inventor of 19 patents with 20 pending. In 2018, for his research contributions, Dr. Pham won the prestigious Arthur S. Flemming award in the Basic Research category. Of over 2 million federal employees, only 12 are honored each year, as he was the first Vietnamese American award recipient. His research breakthroughs are widely reported by both newspaper and online news media and he has given over 30 invited talks.

The service at AFRL has allowed Dr. Pham to meet and connect with many outstanding students and faculty across US, and to communicate, influence, and collaborate with many entrepreneurs. It gives him opportunities to gain experience in leading diverse teams of professionals across multiple theaters, which have enhanced his "global view" of the US Air Force. The most satisfaction Dr. Pham has is knowing he is able to serve, represent, and motivate high-tech small businesses and entrepreneurs that represent the growth and development of so many future leaders and engineers by means of America's Seed Fund and the likes. In essence, Dr. Pham can say that one thing he has learned is, being genuine is really how one gets to know the other person, and by doing so one will get the same thing back.