

Graduate Support Fellowship Proposal

Background

After completing my master's in aerospace engineering at UIUC, I chose to continue my studies at the University of New Mexico in Electrical Engineering within the Space Systems Engineering program. This decision was driven by my passion for Guidance, Navigation, and Control (GNC) for space applications, with a focus on model-free control under disturbances, adaptive navigation algorithms, and trajectory optimization. Through internships at companies like Blue Origin, Varda Space Industries, and Blue Canyon Technologies, I've been able to connect theory with real-world challenges. I'm currently funding my education through these internships while keeping my sights set on the bigger picture: pursuing a PhD and dedicating my career to research that advances this field.

What drives me is the belief that these advancements in space systems should be accessible and benefit everyone. I'm committed to contributing to knowledge that pushes boundaries and ultimately improves how humanity explores and utilizes space.

Benefits

Receiving this fellowship would give me the freedom to focus deeply on my research and coursework without the constant pull of financial concerns. Between my internships, classes, and research projects, I've poured all my energy into building the skills and knowledge needed to make meaningful advancements in GNC and space systems. This support would not only lighten the financial burden but also allow me to dedicate more time to exploring innovative ideas and strengthening my technical foundation. It's about more than just finishing my degree — it's about making sure I can contribute fully to research that has real-world impact and shares its benefits widely.

Use of Funds

The fellowship funds would be applied directly to tuition for the Space Systems Engineering program at UNM. This support is critical as I pursue a second graduate degree that aligns with my research goals and long-term commitment to advancing space exploration technology. With this assistance, I can stay focused on my academic and research pursuits and take the next steps toward a PhD.

Thank you for considering my application and for supporting graduate students who are working hard to advance their fields and contribute meaningfully through research.