1. Tell us about your experiences as a New American. Whether as an immigrant yourself, or as a child of immigrants, how have your experiences as a New American informed and shaped who you are and your accomplishments? (?)

The breeze in Vietnam’s Central Highlands was the first hint of spring. By March 1975, it thickened into the roar of tanks. As the North advanced, my grandfather—who had served in the South Vietnamese army—ran with my newborn mother in his arms. A shell burst nearby, burning her face. Believing she had died, my grandparents slipped to a riverbank to bury her unseen. My grandfather lifted a canteen from a fallen U.S. soldier and poured water over her face in baptism. She blinked.

Survival didn’t bring safety. Because of his service and our family’s Catholic faith, my grandfather spent nearly a decade in a re-education camp. My mother left school in middle school to help feed her siblings, working as a maid and eating leftovers from the plates she cleaned. Years later, the United States opened a lifeline through the Humanitarian Operation—Hạt Ô—offering families like mine a narrow door, a second chance to begin again.

Immigration, to my family, meant letting go of what was for what could be. My mother’s courage in rebuilding our lives taught me that resilience is not abstract, it is the daily act of refusing to give up. I watched her navigate housing forms and public-assistance offices, translating for her even when I barely understood the words myself. She balanced two jobs and stretched food stamps; she’d come home late, use her tip money and Burger King coupons so we could share a warm meal, and only then would we study together for her citizenship test, a fifth grader explaining the three branches of government to someone who had last studied at my age. She would say, “Cúi đầu là sách vở, ngẩng đầu là tương lai”—look down to study, look up to your future—and through grit and grace, she became a U.S. citizen.

My mother’s journey made me a living witness to the realization of her American Dream. I didn’t walk this path alone, it was paved by courage and by the memory of those who ran, rebuilt, and believed. That awareness shapes how I see education: not as personal achievement, but as responsibility. To me, being a New American means carrying the weight of that inheritance and turning gratitude into service.

As America was my mother’s refuge, school became mine. Every week we visited the library, each returning home with a borrowed world. One afternoon, I wandered to the shelf on space, picked up a book about the Moon, and was hooked. Within weeks, I devoured volumes on planets, the Sun, and asteroids. When my school offered little on astronomy, my English teacher stepped in—encouraging me to take advanced classes and showing me how to find scholarships. His mentorship mattered in a community where few students applied to four-year universities.

I chose Iowa State University—close enough to support my family, yet far enough to grow. A full scholarship lifted the financial weight from my mother’s shoulders and allowed me to focus. I became the first in my family to earn a college degree, a milestone built on her persistence, my teachers’ faith, and my own discipline. It taught me that every breakthrough begins when someone believes in your potential.

That belief followed me into research. I reached out to a professor studying spacecraft trajectory optimization before I had even taken an orbital-mechanics class. Instead of turning me away, he invited me to join his team for the Global Trajectory Optimization Competition. Through that experience, I discovered the beauty of astrodynamics—and the transformative power of mentorship. Someone’s belief in me ignited a purpose beyond technical curiosity: to guide others as I was guided and to pursue a graduate education.

When I entered graduate school at the University of Illinois at Urbana–Champaign, I had no funding. To stay afloat, I worked two jobs while taking five classes, hoping to finish faster. Instead, I landed on academic probation with a 2.78. It was humbling—but setbacks are setups for something greater. I thought of my mother, who rebuilt from nothing in a country whose words she didn’t yet understand, working two jobs, opening a nail salon, and still finding time to study for her citizenship test. Her strength reminded me that perseverance isn’t just endurance; it’s adaptation. I rebuilt, too. I rose to a 3.66 and carried that lesson into my current graduate program at the University of New Mexico, where I stand at a 3.94. The numbers matter less than the meaning: every hardship became a compass, pointing me forward.

That lesson became the foundation of how I serve. As an Engineering Career Peer, I meet students who have stumbled the way I did—unsure of their resumes, anxious about interviews, uncertain they belong. We sit together and turn doubt into a plan: drafts become conversations, conversations become confidence, and confidence becomes offers. Many have gone on to internships, full-time roles, and graduate admissions. I taught high-school math and later worked at the Boys & Girls Club, where I led computer-literacy and STEM programs for students who reminded me of my younger self—curious, hopeful, and waiting for someone to say, “You can do this.”

Because of my mother’s grit and sacrifice, I have pursued opportunities she could only imagine. I have worked across the country—at startups, a UARC, an FFRDC, and a major aerospace prime—supporting missions at Blue Origin, MIT Lincoln Laboratory, Space Dynamics Laboratory, Blue Canyon Technologies, and Varda Space Industries. Each role sharpened my technical judgment, but more importantly, it clarified my purpose: using engineering to widen who gets to participate. Through Club for the Future and Lincoln Laboratory Educate, I design K–12 workshops that help students see themselves in STEM. My graduate research explores how assessment design in rocketry education can lift student confidence and learning; where I mentor undergraduates as they build and launch model rockets, translating equations into ignition and flight.

Gratitude, to me, is direction. I intend to pursue a Ph.D. that unites engineering and education—making space more accessible both in orbit and on Earth by expanding the pipeline of who is invited, prepared, and believed in. My family’s story began with survival; mine continues with the responsibility to turn that survival into service. My mother’s perseverance made my path possible; my purpose is to widen that path for others, helping them not only reach safety, but reach their potential. Being a New American means remembering where you come from and using that memory to lead, to build, and to give back.

1. Tell us about your current and near-term career-related activities and goals, as well as why you decided to pursue the specific graduate program(s) and school(s) that you have. (?)

I’m building flight-ready autonomy for spacecraft—tools that answer “Where am I? Where am I going? How do I get there?” across LEO, cislunar, and deep-space regimes. Near-term, my PhD will focus on three pillars: (1) **online trajectory optimization** for real-time replanning, (2) **adaptive, model-compensating state estimation** that remains accurate under uncertainty and across orbit regimes, and (3) **robust, model-free disturbance rejection** for flexible modes, propellant slosh, and unmodeled dynamics. I’ll take each from **high-fidelity simulation → software test → hardware-in-the-loop**, targeting publishable results (2–3 first-author papers) and a CubeSat-class demo validated against explicit navigation-error thresholds. Long-term, I aim to release **open-source GNC infrastructure**—trajectory planning, adaptive navigation, and robust control—plus shared protocols for rendezvous, deorbit, and traffic management, so universities, startups, and agencies can adopt, certify, and extend reliable autonomy at lower cost.

I’m pursuing Stanford Aeronautics & Astronautics to work in the **Space Rendezvous Laboratory (SLAB)** with Prof. Simone D’Amico. SLAB’s mission squarely matches my focus: **astrodynamics + GNC + environment characterization + decision-making** to enable **distributed space systems** (formation flying, swarms), with rigorous validation via hardware-in-the-loop and flight demos. SLAB work includes autonomous multi-satellite navigation using only onboard vision (StarFOX/Starling), demonstrating the kind of field-validated autonomy I want to help push forward. Stanford is also a strong fit for my mentoring goals. Its **AIM (Asian American Interactive Mentoring)** program pairs undergraduates with grad students, faculty, staff, and alumni for one-on-one mentorship attentive to cultural context—I plan to serve as a mentor and channel my experiences as a first-gen New American into practical guidance on research, internships, and graduate pathways. Within Aero/Astro, additional mentoring and exposure pipelines connect students to research and graduate preparation—structures I’ll plug into to keep widening access to space careers.

In parallel with research, I’ll continue hands-on education and outreach (building on my rocketry-assessment redesign and K-12/classroom visits) by developing classroom-ready modules that mirror my lab work—e.g., small-sat testbeds for vision-based navigation and disturbance rejection—so students from under-resourced backgrounds can touch autonomy, not just read about it. Pairing **open tools** with **open teaching** is central to my plan: progress scales when others can build on it. Stanford’s SLAB gives me the research home to make flight-credible autonomy real; the AIM ecosystem and student-support pipelines give me a way to make the path behind me clearer for those coming next.