My childhood—like many—was robbed of me by divorce. I was raised in a fundamentally religious household and after the break-up mother, despite a brilliant intellect and an advanced degree, struggled to find work after being out of the labor market for more than a decade. While my mother worked multiple jobs to provide for us as the eldest of four I fell into the unlikely role of semi-parent—I was forced to grow up rather quickly, bringing many uncomfortable introspections onto myself. The most powerful of these introspections was the realization that the circumstances of my birth had determined much more of my life than I might be comfortable to admit. If I had simply been born in another country so many fundamental things about me might be different—my religion, socio-economic status, etc. In that moment I knew there was no divine truth—an epiphany that led me to leave the church I was raised in and ultimately cut me off from the paternal half of my family—and despite my relative hardships at the time I felt incredibly privileged.

Despite a vanished childhood, that innate child-like curiosity has persisted in me, and I knew I wanted to go to college. As a child I was transfixed by the simplest things—a blade of grass swaying gently in the wind, the throbbing of my pulse just underneath my skin, or the twinkling of the stars at night—and that desire to *understand* how everything works, in the most fundamental terms possible, is what’s led me to keep learning as long as I am able. Money was tight for my mom, and without the support of incredibly generous scholarship donors, Pell grants, and flexible jobs my journey might never have left those childhood dreams. I’ve struggled with juggling keeping my grades up with full loads of classes and working 30-40 hours a week to stay out of debt and pay rent, and as a result I’ve gained strong time-management skills that prepare me well for graduate school. My insatiable curiosity has led me to meander somewhat in my academic studies—I often remark to friends that if money were no object I would like to simply be a college student forever—but I’ve worked hard to maintain good grades in respect of the investments that so many people have made in me in support of my education, and this meandering has made me all the more confident that my true home is in astrophysics. Originally I started school majoring in math and music (subjects which I’ve collected minors in and still adore) and thought I might minor in physics as an aside. That all changed in my calculus classes—I can specifically remember doing a homework exercise where we were to derive Kepler’s laws from fundamental principles, and for the first time the beauty of mathematics struck me from the page. I realized most of the problems I enjoyed in my calculus courses were physics-related—in hindsight an obvious connection—and I took a hiatus from my math major to see if that spark would still exist in pure physics. That spark kindled a fire inside me and I’ve never looked back, taking nearly all the physics courses our department offered (even when not required) and endlessly bugging my professors to try to truly understand the material. I’m proud to say that since making the switch I’ve maintained a 4.0 GPA in my physics coursework, but I’m even prouder to feel like I have internalized even the smallest inklings of how the universe works.

I’m most fascinated by physics at the grandest of scales, and by the seemingly endless possibilities that exist for diverse systems in the cosmos. But despite my engorgement of the material and academic successes, I have always worried that I would not have a knack for actually exploring our universe through research. Because of my complicated family situational constraints I’ve never been able to go far from home and thus could not participate in any REUs, and opportunities within my department are limited—only two professors do active research in astrophysics. As a result of these circumstances and anxieties I’m a late bloomer in research, but I am proud to say that although my experience is certainly more limited than many, I’m confident I can be productive in distilling my innate curiosity to tangible research results. Since this spring I’ve worked with an incredibly supportive mentor, and in a short timespan I’ve learned to program in several new languages, taken the plunge to dual-booting my computer with Linux, and written scripts entirely on my own that have enabled us to tell fascinating stories about the cosmos. Specifically I’ve worked with my mentor to identify accreting x-ray binaries from archival CHANDRA and XMM-Newton data, an incredibly rewarding data analysis challenge for me that has taught me so much about the actual workings of research and how to reduce complicated data files beamed down from orbit into tangible results.

Ultimately, I want to come to Berkeley because it aligns with so many of my personal and professional hopes, dreams, and ideals. Berkeley fosters diversity in ways few institutions do and from my experiences in speaking to current grad students the department culture is incredibly collaborative and supportive. I hope to one day be a professor as it’s one of the few places where my introspections and excitement for research collide, and attaining a Ph.D. at Berkeley would be an incredible step towards that ultimate goal. I’ve had a lot of teaching experiences that I’ve immensely enjoyed throughout my undergraduate career, but the most powerful and fulfilling has been my recent volunteer work in some of our local prisons. I have started a program teaching introductory programming in Python as well as doing general outreach labs/demos from equipment in our stockroom, using my knowledge to enable future opportunities for those whose circumstances haven’t been as supportive as mine. I hope to find people to continue what I’ve started here before leaving for graduate school, and hope to continue serving in a capacity similar to this at Berkeley. Careful self-reflection has enabled me to recognize the incredibly unlikely microstate that I’ve been born into, that the hard work that I’ve put in to achieve what I have thus far is just the tip of the iceberg. I hope to use this privilege I’ve been gifted not to subjugate as so many before me have, but to uplift and raise the voices of others into a chorus more powerful than any one voice could ever be alone. To that end, I humbly submit my application to your astrophysics program, that together we might gain some new understanding of the cosmos while simultaneously making it a little better for everyone along the way.