

Five years ago, there was a graduation in my family—that of my mother. And although there were hundreds of other graduates, to her, that day may have been the most special, the most precious day in her life, as college was her dream for decades. She was the only one who couldn't go to college among her siblings, as my grandfather's business was hit hardest when it was her turn.

I admire her not just because she was 50 or was fully sponsored by the government for college, but because of all the hardships she endured. She had to juggle her studies with her work, working full-time at the Ministry of Labor, perhaps the busiest government office. She left for work two hours earlier and invested all her weekends studying. To be honest, I worried about her, but in the end, I became her cheerleader, as I could see that she was very happy. A truly admirable, courageous individual indeed.

Just like my mother, who dared to undertake a new challenge, my father also taught me that life is full of beautiful choices you can make—he himself is a living example. Starting in heavy industries, he took off to Japan to study and then undertook automotive design. And now he is in the landscape business. But not once did he fear or hesitate.

As such, my parents are my mentors, who have taught me many valuable lessons, like the power of hard work, curiosity, and courage. I learned another lesson as well: there is never one way, but countless ways in life. These values have guided my life and career every moment.

I worked in two start-ups during the last seven years. Start-ups, as we all know, often stand for uncertainty with no guarantee of success; most do fail, with sofa beds for quick naps as work hours are notoriously long because there is so much to do. These were all a reality for me as I joined during their founding days. But still I loved my experiences. Nothing is guaranteed at a start-up, but that is precisely its beauty as well; you can freely unleash your ideas as the company needs good ideas. Everything is simply so dynamic, fast-paced, exciting, and fun. And that joy you feel as you see them grow is amazing as well. Being part of this success story, now considered the No. 1 AI company in Korea and publicly listed, is ever more meaningful since I really did give my 300%.

It was even more meaningful with colleagues who endured the hard time together. From designers to doctors and researchers, my colleagues were as diverse as we could be. Even the researchers brought different backgrounds—biomedical engineering, EECS, mathematics, and physics. And we also worked with lawyers to earn permits for our medical equipment, and to prepare for the IPO, a CFO with a statistics background was hired. There were difficulties in communication at first. However, we overcame it after realizing we were all striving toward the same goal. While we all spoke different “languages” per se, I loved and love all this diversity, as I was amazed to see how for even one topic, everyone had a different idea or opinion.

And at the second start-up, now more seasoned and experienced, I led the development of a model that was conferred as an innovative medical device from the Korean FDA, accelerating its actual commercialization. More than any, this commercialization means so much to me since it is being used at many hospitals in Korea, helping thousands, if not millions.

While it was gratifying to see my disease prediction and diagnostic products used in medical settings, I also realized that even when diseases are diagnosed early, often there are no definitive treatments available. For instance, despite developing a model for the early detection of heart failure using ECG, I found that treatment often focuses merely on slowing the disease's progression, as no cure exists for conditions like left ventricular diastolic dysfunction. Similarly, diseases like diabetes and hypertension are managed long-term rather than cured, which has driven my interest in exploring the fundamental causes of diseases and developing effective treatments, leading me to the field of bioinformatics.

The perseverance and resilience I inherited from my parents helped me overcome the challenges I faced while working at start-ups. Now, with courage and curiosity they passed on to me, I am ready to take on the challenge of pursuing PhD studies. I now hope for yet another graduation in the family to invite my parents so that I can tell my parents how grateful I am—and how much I love them.