Ozlem Ozgun's Autobiography

When I was invited to write for this corner, two questions immediately appeared in my mind. First of all, how far behind should I go in time to start my autobiography? Start from very early ages? Fortunately, I decided to start from the years of my childhood when I first intended to be an engineer. The second question was: Which details should I include in this bio to make my history interesting for the readers? Why should people read my autobiography while they might prefer spending time on reading an interesting book or watching an enjoyable movie? After some thought, I have realized that some turning points in my life have led me to an interesting path, and a short account of these turning points may also interest the readers of this corner. It would not be an exaggeration to claim that I have experienced a transformation over the past years. A shy person who was not very much aware of her capabilities and power went away, and a self-confident woman engineer who enjoys her job and believes that she can handle challenges with patience, determination and persistence has come to birth. In this writing, you will be greeted with a story of a person who has experienced revival and has justified to herself the quotation "Choose a job you love, and you will never have to work a day in your life".

It is hard to be an engineer, and it is twice as hard to be a woman engineer. In the 80s and 90s, it was quite unusual to hear a little girl saying "I want to be an engineer" in my country where most of the girls used to say teacher, doctor, nurse or actress when they were asked the classical question "what do you want to be when you grow up?". Probably, my "out of bounds" character started to prevail at this point. I was very interested in mathematics and computers (which were just becoming popular among children to play computer games), although I did not have one. When I was asked this classical question, I was saying that I would like to be a computer engineer, although there were no engineers in my family or among my relatives. Fortunately, my family has always been there to support me along the way.

Young people in my country take an annual nationwide university entrance examination upon graduating from high school, and they are admitted to a university of their choice based on their exam scores. I managed to be 94th in this examination among one million students, and hence, I had a chance to join whatever university or department I wanted. My words about “becoming a computer engineer” in the previous paragraph may lead you to think that I had most probably chosen the computer engineering option. However, I was led to a completely different path when one of my teachers asked me why I did not prefer the electrical engineering education as my first choice because of its higher rank in terms of the exam scores. Since I was too inexperienced in those ages, I was not aware that his question was indeed unreasonable and would lead me to make a career choice based on department ranking, rather than a ranking based on my interests. Eventually I started my higher education life in the electrical engineering department of Bilkent University in 1993. Do I regret to become an electrical engineer? Interestingly no. When I look back, I am now happy with my career experiences, despite the fact that I sometimes had mixed feelings about my career path in the past. I would like to thank my teacher, who was perhaps the first person who initiated the path of my career.

My class at Bilkent University was like a champions league. It was full of students who received the highest scores in the university entrance exam. There were only seven female
students in our 50-person class. This was indeed the most crowded class in those years in terms of the number of female students. It was very difficult to survive satisfactorily in such a highly competitive environment. Towards the end of the first year, I began to doubt whether I was suitable for this department. This was probably because of having difficulty adapting to this highly challenging life and being far away from my family for the first time. Sometimes, I was falling into darkness and thinking to leave the university. Fortunately, this disturbing feeling did not last long. However, I always looked forward to graduate as soon as possible because it seemed to me that the challenging education years will come to an end after graduation and having secured a nice job, I would happily settle in my hometown. I realized much later that this was just the beginning, not the end! In spite of this distracting feeling and maybe the lack of self-confidence, I graduated with a good GPA, although not perfect. When I think about this period, it seems that I was in an unconscious mode because although I was doing well somehow, I was neither aware of this nor feeling happy about what I was doing. The most concrete thing I remember from my undergraduate education is that I was enjoying studying mathematics, computer programming and electromagnetics. Interestingly, these subjects are indeed the basic blocks of computational electromagnetics, the field which I am actively involved with great pleasure. Perhaps, the law of attraction ("like" attracts "like") changed my life in the long run and led me to choose the topic of my life. Why not?

After my undergraduate years, I started to consider life in a slightly different way. In place of the person who wanted to graduate as soon as possible during the past four years, a new person who wished to further improve her background came to birth. So, I decided to continue my education and commence my Master's degree studies in the same department. When making this decision, I was influenced by the advice of my supervisor (Prof. Irsadi Aksun) who guided me during my 4th year senior project. I worked with him again during my master studies about the genetic optimization of microstrip antennas, which is the continuation of my senior project. I was feeling happier because I started to work on and actively write computer programs and learning a new programming language (C). But, in spite of such positive feelings, it seemed something was still missing and perhaps I was being in quest of self-actualization. Towards the end of my master studies, I was again obsessed with the idea of terminating my education life and having a job. Eventually, I received my Master's degree in 2000 and started to work for Tubitak-Iltaren, which was a newly-established research institute in those years. I was among the first staff members and worked there until 2004. The studies that I have done in this institute have added so much to me, not only at that time, but also now. Electromagnetic propagation problems and the codes I have developed in this context gave me great pleasure and increased my confidence. I started to realize the "feedback loop", namely: "I can do better if I love my job, and in turn, I love more if I can do". My personal awakening was just beginning.

After spending a year in Iltaren, I decided to start PhD studies because I wanted to learn more and to perform better at my work. Interestingly, I was feeling great enthusiasm to start my education life once more as if a magic wand touched me. When I told about my decision to my director, he encouraged me and suggested me to contact Prof. Mustafa Kuzuoglu at Middle East Technical University (METU), who works on computational electromagnetics. This incidental acquaintance with Prof. Kuzuoglu is one of the breaking points that positively changed the flow of my life. I was really enjoying the topics that we worked together, especially the finite element coding was giving me great pleasure. In addition, Prof. Kuzuoglu's helpful and modest personality was giving me additional power. In the meantime, I left my job in Iltaren and started to work at Aselsan as a system engineer in 2004. While continuing my PhD studies, I decided to pursue an academic career. For this purpose, I left
my job in 2005 and started to work on my thesis full-time at home. During this peculiar one-year-and-a-half period at home, my life was quite unusual. While performing long-running simulations on my computers, I was setting the alarm to get up at midnight to check the status of the programs. Like raising a child, I was raising my thesis. I received my PhD degree and honored by the METU thesis of the year award in 2007. Afterwards, Prof. Kuzuoglu suggested me to work with Prof. Raj Mittra for a while so that I could take the advantage of Prof. Mittra's great expertise and experiences. In this way, my American dream began. My one year at Penn State University was productive and we developed the characteristic basis finite element method with different approaches and applications. I was very impressed with Prof. Mittra's devotion to work and his mentoring capabilities.

After returning from the United States in 2008, I started to work at Middle East Technical University - Northern Cyprus Campus as an assistant professor. Here, my dream academic life was launching. I taught several courses and continued to work on different areas of computational electromagnetics. In the meantime, I received the award for excellence in electromagnetics bestowed by Felsen Fund - Dogus University in 2009. After a while, homesickness prevailed and I decided to go back to Turkey. Since 2012, I have been working as an associate professor at TED University in Ankara, which is a newly-established university. During my academic life in universities, I happily noticed that the number of female students preferring engineering departments has increased and currently I have several female students.

Well, is it the end? Is this the final point that I want to reach? Maybe “yes” because I have been doing the job I love. But, the answer is "no" as well because I have other dreams I want to accomplish. I wish to broaden my research areas and learn more. More importantly, I want to guide graduate students throughout their long education lives. Perhaps, I want to create a breaking point that will positively change the path of life of a young person. It seems that self-actualization and self-development are never ending processes. Hence, I feel that I will never reach my destination and my academic life will be an endless journey.

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