My Reflections on being a Software Engineer

Ms. Wafa Waheeda Syed
Software Engineer, Qatar Computing and Research Institute
wafawaheeda@gmail.com

Software Engineer! Software Engineer is well-known as a common job title to address anyone working in Information Technology. However there is more to it. Most of us are software engineers with different flavors. And most of us do not know how and why we ended up becoming one. I am happy to share my reflections on being a software engineer and why I became one.

I, like many others did a Bachelors in Computer Science & Engineering in Chennai, Tamil Nadu with a goal to become a Software Engineer. However, on finishing my undergrad, I moved to Qatar with a motivation to explore the vast field and figure out what I like.

I had started my journey with an internship at Qatar Computing and Research Institute, where I single handedly worked on a project. I was exposed to new libraries, frameworks and concepts in the process. I worked on developing an app which visualizes insights by mining Twitter data. I enjoyed developing the data visualization element of the project, most.

I decided to pursue a Masters in Computer Science at Qatar University and get more perspective. Through the program, I was exposed to different areas of computing. I went on to pursue data visualization as my research topic. I also had started working on a project where I had the opportunity to pursue research and development in data visualization and human computer interaction.

Reading research papers, framing hypothesis, designing experiments, developing the charts (using d3.js, three js) and iterating based on the user feedback, had become my work routine. The exposure to research and my hands-on experience with the visualization libraries and frontend frameworks was a good takeaway for me.

All through my postgrad, I have had long thoughts about my career path. I was deciding if I should pursue research or get in to development. Upon reflecting on my experience so far, I somehow decided to get in to development. And now, after becoming a habitat of the coding and software engineering ecosystem, I look back to reflect on why I chose to be a software engineer and what it means to me.

Simply put, my developer journey began from the day I started enjoying the computer lab classes in my school, where I was introduced to the World of Web by designing web pages with HTML and flash. I still remember how exciting it was when I wrote my first web page or created my first flash animation.

I was never a student who topped the class. I was rather the student who simplified concepts and explained it to her fellow mates. I picked on to that and got in to volunteering with IEEE during my undergrad.

I remembered several such events that I organized, spoke and contributed. Some of the events were held at national and international scales, with India Council, Women in Computing and Women in Engineering. I had also received a Richard E Merwin scholarship from IEEE Computer society in for my contributions, which inspired me to keep going.

The opportunities I got included meeting prodigies like Vint Cerf, who co-designed the TCP/IP Protocol. There were a lot of moments where I got inspired and wanted to share those learnings, so that inspire others.

Thus I understood that: an engineer is a person who is a problem solver. He thinks, reflects and continues to learn. The opportunities I got and the events I did, have helped me establish an engineering mindset.

I believe humans grow and expand in groups and so, through events I practice collaborative learning. I believe that learning is an ongoing process that has no end. It is an essential element of life. I am happy that as a software engineer I can act on my beliefs, everyday.

About the author

Wafa Waheeda is a Software Engineer at Qatar Computing and Research Institute. She is a visual thinker who believes in tackling problems with simplicity. She enjoys collaborative learning and heads multiple tech communities in Doha. More about her at https://about.me/wafawaheeda