

Karina Sanchez

6/16/2021

CS - 499

## **Professional Self-Assessment**

Karina Sanchez

Southern New Hampshire University

CS – 499 Computer Science Capstone

June 16<sup>th</sup>, 2021

### Professional Self-Assessment

My computer science journey has been about 4 years long. I have had the opportunity of working on several distinct projects within school courses and my work environment. I have been able to gain knowledge in several different areas, some which include software design and engineering, algorithms and data structures, and databases. I have learned the basics and become more familiar with some programming languages like Python, HTML, CSS, and JavaScript. I have been able to enhance my interpersonal skills and grow my computer science knowledge.

As a learner, I recognize it has been an ongoing and collective outcome on the information I have absorbed, comprehended, experienced and applied. In my first years of college, I was reserved and quiet. I didn't understand many terms used and I was often confused on the work assignments. As I have continued in my studies, I have seen a shift in my interpersonal skills. I am more assertive, organized, detail-oriented and within the years, have built my own effective method of learning new topics. I have learned to ask questions when I need further understanding and to not procrastinate. I always meet my deadlines for school, work, and life in general.

Within this journey, I have gained skills and knowledge that have been essential for building my career. Some of the most helpful skills I've been able to use towards my current job role are my basic programming skills using Python, JavaScript, and HTML, my knowledge on web applications, and my comprehension on databases like MySQL, MongoDB, and MariaDB. A lot of my skills gained have to do with the distinct projects I had to work on for my SNHU courses like developing a web service using software stack and implementing an industry standard interface. This project allowed me to get familiar with MongoDB and its API, by learning to use it as an internal storage and retrieval service. Another project I had the

opportunity to work on was my Prototype Android Mobile Application. This allowed me to get familiar with software design and development on Android Studio and Java. I was able to concentrate on frameworks and the distinct approaches towards a project, as well as design a human-computer interface based on required targeted audiences. School also allowed me to get familiar with secure coding audited reports, which helped analyze code manually and automate testing methods for vulnerabilities in code. It also helped get familiar with embedded system devices like Raspberry Pi and Grove Pi. I used these embedded systems to build and extend capabilities of a weather station prototype. I built a custom software component that controlled the sensors and the sending, receiving, and storing of data using JSON files and the embedded system devices.

Outside of school, I have had two internships and my current Business Analyst role, all which have allowed me to feed into my computer science skills. During my internship with HCL Academy, I was able to work on an Algorithm Visualizer project, which helped me expand my skills in algorithms and data structures, but also with programming languages like HTML and JavaScript. For my current job, I am being cross trained into their Frontend Development team. I get to work with the developers on creating a system called Kirby, which is a Gateway to services on Amazon like S3. I get to build my development skills and team collaboration skills by assisting with creating some features, but also building and furthering my understanding in computer science like strengthening my skills in methodologies, SDLC processes, and Agile teams.

For my last course with SNHU, I had the opportunity to expand 3 of my previous projects, a calendar application, algorithm visualizer, and a chat. This course allowed me to expand on each of these projects in a deeper level. It allowed me to get familiar with the React

framework, expand my knowledge on four algorithms, learn about Firestore databases and learn more about designing and expanding a software. The course also gave me more insight on how GitHub works and allowed me to spend some time creating my ePortfolio, which I decided to create myself and not just let it be a common template on GitHub pages. Beyond computer science skills, my most helpful trait is my willingness to learn. Within computer science, the field is constantly evolving, and new topics always rise up. It is impossible to know it all, but as long as I am willing and able to learn, then I can be an ideal candidate.

My original goal, before obtaining my degree, was to get hired within our IT department. Thankfully, I've been able to meet that goal. Now that I am part of the IT department, my goal is to absorb, comprehend, experience, and apply as many skills as possible. I would like to become a cross functional developer in order to assist my current employer create incredible software. My current target and specific goal is to learn JavaScript, React, Redux, Python, HTML, and CSS at a deeper level in order to keep assisting with creating our application called Kirby. These skills obtained will assist in being an ideal candidate for a future employer.