Professional Self-Assessment

My professional objective would be to enter into the field of healthcare technologies/IT with my 5+ healthcare experience and my computer science degree background. The ePortfolio showcases my knowledge of key computer science principles and skills: software design and engineering, algorithms and data structures, and databases. Through the coursework, I have gained a solid foundation for several different programming languages including Python, Java, and C++. I’ve also constructed a RESTful web service using Python that enabled CRUD functions with a MongoDB database of stock market securities information. I am collaborative and a team player from my experience working clinically as a nurse as well as communicating and working together with students through SNHU’s discussion boards. Through my Collaboration and Team Projects course, we worked on a project together using BitBucket and Eclipse Git to perform code reviews and simulate a collaborative team environment. In my Software Development Lifecycle course, I learned the benefits of Agile and Scrum ceremonies and the key to communicating constantly with stakeholders so that it allows for continuous improvements and being able to adapt to any changing software requirements. My Android e-commerce application for a coffeeshop showcased my skills in mobile app development, data structures and algorithms, and databases. It also gave me experience in how to ensure security for the mobile app users. Software engineering skills were shown in my project where I programmed a weather reporting embedded system prototype.

For my software engineering artifact, using Python, I programmed RaspberryPi with GrovePi+ sensors to create an embedded system that gathers and stores temperature/humidity data and outputs visuals using LEDs for specific data conditions. The device collects data only in daytime conditions in 30-minute intervals. To expand on the complexity and usability of the product, I programmed the readings to be sent to a real-time web dashboard, PubNub, to allow for viewing of data on the Internet from any location. For both the data structures and algorithms, and the databases artifacts, my Android e-commerce app, Local Coffee Shop, showcases my abilities in these categories. Implementing a gallery within the app shows how the images need to be properly stored, accessed, and displayed using my knowledge of data structures and algorithms. Implementing an e-commerce capability with the app shows how an SQLite database can be used to store transactional, customer, and product data to simulate an e-commerce application. All of these artifacts on the portfolio show that I have a strong foundational knowledge in Python, Java, mobile app programming, and databases. These skills can be applicable to many software programming opportunities, including healthcare technologies.