

Professional Self-Assessment

During my pursuit of a BS in computer science from Southern New Hampshire University with a software engineering concentration, I have acquired a diverse set of skills. These include proficiency in various programming languages, an understanding of computer hardware and software, and familiarity with the different phases of the software development life cycle. I have demonstrated my expertise in database management with SQL and MongoDB and my understanding of programming languages like C++, Python, and Java. This comprehensive program has equipped me to excel in a career in software engineering.

SDLC projects like the thermostat control board model `gpinterrupt.c` have helped me learn embedded system software development and operation. I'm good at hardware interactions, code reuse, and program stability. I worked on `BufferOverflow.cpp` in CS 405: Secure Coding to learn about security problems and how to address them. Fixing buffer overflows and using secure code has enhanced my software's reliability and safety. Information Models and Programs: I used `AnimalShelter.py` to demonstrate my data operations and algorithm design skills in CS340: Advanced Programming Concepts. This project showed I can handle complex data structures and apply theoretical concepts. `AnimalShelter.py` helped individuals handle MongoDB NoSQL databases. This project investigated database access security, data integrity, and CRUD.

Through the program and culminating project, I have gained valuable skills beyond technical knowledge, significantly enhancing my career development. It was recommended to take a systematic approach to finding and fixing complex issues for data processing, code debugging, and security vulnerabilities. I have honed my project management abilities by submitting my work on time. These abilities enable me to organize, carry out, and assess my tasks. Communication is vital in teamwork and business, and code reviews and detailed

documentation have helped me enhance this skill. The curriculum has fostered a spirit of continuous learning and technical relevance through its experiences and challenges. Because of my experience in the computer science program and the CS-499 Capstone project, I am more prepared for the workforce. With the information and knowledge presented in this ePortfolio, I am confident in my ability to make a positive impact in the field of computer science. As a software developer, I can't wait to use these skills in the real world.