

Completing my course requirements throughout the Computer Science program and developing this ePortfolio is significant in demonstrating my strengths, shaping my professional goals, and transition to a successful career as a software engineer. This capstone project shows my transition from a student programmer to a well-rounded professional software engineer who is capable of solving problems across multiple domains. I have two major achievements documenting my progression: my experience as a Software Engineering Intern at Wells Fargo, and my academic achievements maintaining a 3.90 GPA.

My journey through the computer science program has made me capable of succeeding in collaborative team environments. For instance, during my internship with Wells Fargo, I contributed to the development of a Kafka data streaming platform and collaborated with a team of developers to reduce system downtime by 25%. Overall, this real-world experience, in addition to completing CS 250 (Software Development Lifecycle), has given me exposure to Agile methodology, that has taught me the importance of clear communication with stakeholders of various technical backgrounds.

Within data structure and algorithms, my upgraded Pirate Intelligent Agent artifact reflects my proficiency in next-generation algorithmic techniques such as priority queue implementations and reinforcement learning optimizations. The 28.8% improvement from priority-based experience replay reflects my capability to utilize theoretical concepts for everyday problems, a skill directly applicable to the optimization efforts I conducted on internal systems while I was an intern at Wells Fargo.

My experience with software engineering and databases is evidenced through the Android inventory management application, as well as an animal shelter dashboard powered by MongoDB. Both of these projects show my capability as a full-stack developer with many skills, from mobile application design to complex aggregations in a database. This fits well with my work experience in cloud infrastructure and automated testing frameworks because it shows that I evolved from academic projects to projects involving enterprise-scale solutions.

Security has been a steady point of emphasis with all my improvements, from putting BCrypt password hashing into place within the Android app to secure database connections and data verification within the dashboard app. Work experience managing sensitive customer data as a Bank Teller and course study of software security have given me a security-focused mindset invaluable to today's development arena.

The three artifacts in this portfolio compliment each other to showcase the full range of my abilities as a software engineer. Each of these artifacts represents a different aspect of software development: mobile app development with security considerations, implementing advanced algorithms with performance improvements, and full-stack web development with database considerations. When you consider each of these artifacts along with my professional experience developing Kafka streaming platforms and automated testing frameworks, they illustrate my readiness to contribute immediately to any software development team while continuing to grow and learn in this dynamic field.