Interning at Gilbarco Veeder-Root

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Type of Experience (select from assignment description)	*Professional Development - Internship*
Date or Date Range (*e.g. Sept. 2, 2024 or May 6, 2024-August 6,2024*)	*May 1, 2025 - Aug 31, 2025*
Research and Service Categories Past this Point ONLY	
Average Hours Per Week	
Department/Organization that hosted experience	
Supervisor/Coordinator Name, Title, and Contact Information	

My internship at Gilbarco Veeder-Root (GVR) in Greensboro, North Carolina, was my first professional experience in software engineering. As a Software QA Engineer Intern, I worked in a hybrid setting that combined both in-person collaboration and remote work. Over the summer, I contributed to automating software initialization and validation processes that impact over half of the gas pumps in America. I also created a reusable library that automated interactions with a remote power-switch API spanning two continents, and I deployed critical hardware and software under time-sensitive deadlines that helped safeguard major business contracts.

How I Arrived at this Experience

Several of my professors encouraged me to apply to internships that aligned with both my technical interests and my curiosity about large-scale software systems. I applied to a lot of different companies, and I was very pleased to hear that I got an offer from GVR. I was able to secure this internship, took out a loan to buy a car to drive to Greensboro, and began my first step into the world of professional engineering.

What I Learned About Myself and Others

This experience taught me that I thrive in environments where I can bridge hardware and software together. Before this internship, I had imagined myself working exclusively in pure software development roles. However, at GVR, I discovered that I enjoyed the challenge of understanding both the physical systems (like fuel pump hardware) and the software validation processes that ensured their safe and efficient operation. I learned that I am adaptable, curious,

and persistent when troubleshooting systems that span multiple technologies and even multiple countries.

I also learned a great deal from others. My mentors and teammates demonstrated the value of collaborative problem-solving under pressure and between time zones. Watching what goes on behind the scenes with critical deadlines taught me that technical knowledge must always be paired with strong communication and teamwork. I noticed how engineers across different departments and continents worked together seamlessly.

Expectations, Challenges, and Memorable Moments

Going into the internship, I expected to spend most of my time writing code. While coding was a large part of the experience, I was surprised by how much time was also dedicated to testing, documentation, and deployment. I quickly realized that professional engineering work is about far more than building. It is also about validating, communicating, and delivering solutions that meet strict requirements. In short, testing is important.

One of the most memorable moments of my internship was successfully deploying a hardware and software update under a critical deadline. The stakes were high, as delays would have negatively impacted contracts with major clients (think of the Big 5 gas companies). Completing this task gave me a sense of accomplishment and made me realize how my contributions fit into the larger mission of the company.

The most challenging element was working with systems that were overseas. My team was in Italy, which meant that after 1 PM, I couldn't get feedback or help. To circumvent this, I started waking up earlier and making changes that had a chance of breaking things earlier in the morning, so that if hardware needed to be reset, I didn't have to wait a day.

Communication and Team-Building Skills

This experience significantly improved my communication skills. I learned how to clearly explain my technical progress in team meetings and status updates, tailoring my language to both engineers and non-technical managers. Working in a hybrid setting also forced me to become more intentional in my communication, whether through written documentation, Teams messages, emails, or video calls.

Team-building was another important area of growth. I learned to ask for help when needed, contribute to brainstorming sessions, and support my teammates during testing and deployment. Over time, I became more comfortable stepping into conversations and offering solutions, which strengthened both my confidence and my role within the team. I asked so many questions this summer.

Impact on My Career and Academic Aspirations

This internship had a major impact on my career trajectory. It gave me a clearer sense of what kind of work excites me: building full-stack solutions that connect software to the real world. It

also helped me see the importance of reliability and testing, areas I had not considered as central to my career before. I did get a return offer and am interested in starting my career at GVR.

Academically, the experience also reinforced the value of collaboration and deadlines. I now see assignments and group projects not just as exercises, but as training for the fast-paced, high-stakes environment of professional engineering.

Looking Forward

The lessons I gained from this experience will have a lasting impact on my future. I now feel more confident in my ability to contribute to professional teams, handle challenging technical problems, and deliver solutions that matter. I also have a clearer vision of the type of engineer I want to become: one who bridges software and hardware, communicates effectively, and builds solutions that directly impact people's lives.