Describe your overall duties/ responsibilities as a Manufacturing Engineer:

As a manufacturing engineer that focuses on weld fabrication, I am responsible for developing work instructions that involve detailed build sequencing and ensuring that they are welded in conformance with the applicable standard. I also have the duty of reviewing vendor weld documentation to ensure that it meets various naval and commercial welding standards as well as our customer’s requirements. A new developing role of mine is to design test pieces and develop welding parameters for additive manufacturing utilizing the gas metal arc welding process.

Explain the skills/abilities that are required for being successful in your role:

In a manufacturing setting, it is important to have good time management and communication skills as well as keen attention to detail. My work is almost always driven by the manufacturing schedule, and it is crucial to work diligently and timely to best aid those in operations. Manufacturing weld fabricated parts involves when working with a variety of other departments within the organization, meaning clear communication is key for success in coordinating efficiently with others. Working with a variety of weld standards, it is important to have strong attention to detail in order to produce the best quality product, as they all have different requirements.

What advice would you give to students who are considering majoring in Welding Engineering?

Welding engineering is composed of a wide variety of engineering disciplines, including electrical, mechanical, materials science, and even some computer science. It gives you a niche, yet diverse, skillset that can be an asset to many companies in various industries. The welding engineering program also offers a tight-knit community that aids in exploring various internship/co-op and even career opportunities.