Final ePortfolio Reflective Letter

My work ethic throughout the semester for Fluid Mechanics was exceptional and not easy to accomplish. On top of taking 17 credits this summer I still managed my time every day to make sure I completed the notes, looked over them, and completed homework. Throughout the semester we covered many valuable and important topics I will use throughout my career. There are many topics from this class but some of my favorites include the nature of fluids properties, pressure and forces, conservation of energy in fluid systems, and friction losses in those systems. Some areas that I feel improved the most is conservation of energy (Bernoulli's Equation). At first it took me some time to understand it but after some practice I began to understand and enjoy applying the equation. I really enjoy its application because it can be used for anything and is super useful for my future career. As I have said before in other reflections, this course has everything to do with my career. Every little detail covered in this course will intersect with my future job. I have not been able to use this information yet in my career, but I am sure I will soon. For my future career, I want to work for this government contractor designing pipes and systems. Many of these topics in class will help me be ready for when I do have to design pipes and systems. As said before, I genuinely believe everything in this course will be especially important for my professional career. If I had to give myself some advice for starting this class, I would say to enjoy it and take your time with the problems but also take in as much information as you can. After taking this class, I improved as an engineer because I have a much wider understanding of pipes, pressure, fluids, etc. I didn't really have a great view of pipes and fluids before this class, and I think understanding things like that makes you an even better engineer. My biggest accomplishment in this class was receiving an 87 on the third test. This was a big confidence booster, and I really enjoyed this test because it is my favorite type of problem. I wouldn't say I mastered anything because I can always learn more but the thing that I am the best at is Bernoulli's equation and its application. Like I said, test 2 was the application of Bernoulli's equation. I used the equation at two different ends of the system, one having pressure and the other not having any pressure. The problem asked for the pump power required for the 1m height of water. After finding the height, velocity, and pressure at each point it was pretty simple from there. I would say my strengths include the use of Bernoulli's equation, manometer problems from the beginning of the course. I performed fairly well on those tests and homework problems. Some mistakes I made in the manometer problems were simple errors like the wrong SG or converting the height to a different unit and other simple errors. Some weaknesses include buoyancy problems, I struggled with those problems on the test. It was so simple that W equal Fb but I rushed many of my problems and have a hard time relaxing on tests. Before this course I thought it would be very difficult and almost dropped the course because of the load I was taking. Now I still think this course is difficult, but it was extremely interesting and different from other courses. Thank you for an amazing semester Professor Ayala.

-Nicholas Albano