

Hi everyone, my name is David Loeza, I'm from West Allis which is West of Milwaukee. I'm pursuing a degree in Mechanical Engineering and I'm going into my 3rd year. I'm also the First Generation of my family to go to college and be born in the United States.

I was first introduced to the world of research through the UR@UWM program before my freshman year in the Raicu Biophysics Lab. This program helped me start with my professional development journey through the series of workshops that were held and working alongside with the research team that I was in.

Right now, I'm working in the Connected Systems Institute which works with connectivity, automation, and AI to enhance manufacturing. Through the Support for Undergraduate Research Fellows (SURF) program I'll be enhancing CSI's AI Vision system capabilities. So that in our manufacturing line to teach students, the vision system is able to perform the task of inspecting products and making the decision for the robot arms to either throw it to the scrap pile or fix it. At CSI I'm doing research on a technology that can be pointed to with an industry informed problem statement in mind. The benefits of being involved in this work include getting hands-on exposure to truly cutting-edge technology in manufacturing because employers want to know what kind of impact a prospective engineer has made in their workplace. I'll be able to talk about how my work connects to a CSI Partner, which could be Rockwell Automation, Milwaukee Tool, Microsoft, or Husco. Having the opportunity to work in Manufacturing research makes me want to learn even more and broadens my view on Engineering and what a collaboration with industry is like. The work that I do validates my role as researcher and will have an impact in the workforce and my future role in it.

I also get to make many connections, I've already met some industry partners from Rockwell, Microsoft, and more to come this summer. I've also met some of the people from the Lubar Entrepreneurship Center here in UWM who share similar interests as me. This experience has helped me visualize a path for my future which is pursuing mechanical engineering with a blend of entrepreneurship. For example, having been connected with some people, I plan on applying to the Start Up challenge here at UWM and work with the Prototyping Center the school has in Waukesha.

If you were to ask me why the university should continue to support student research, I'd say that the interactions students make while doing research help them build a professional network and gain insights which enhances their career prospects. In my case, because I'm surrounded in an innovative environment this is going to help guide me for the future that I want for myself.

