## Blaire Rodriguez, Project Manager

Blaire has had 4 years of engineering project management experience following this year's Senior Design course. She brings energy, emotional support, analytical thinking, team building, and time management skills to the team. She has previously done design work in welding, machining, aesthetics, 3D printing, and electronics. She possesses a "jack of all trades" skill set and is always eager to try new ideas and skills. Blaire helped build this project through organization and support for her teammates in however they needed her; this included being the main point of contact between the team, directors, and client, as well as applying technical and testing skills. She plans to carry what she learned in her project manager role into her dream career of teaching engineering, math, and science. Blaire is scheduled to graduate in December 2020 with her degree in Engineering Plus with a Mechanical Engineering emphasis and a CU Teach Engineering Physics concentration.

## Abdullah AlKhaldi, Logistic Manager

Abdullah is a mechanical engineering student who has a minor in Engineering Management and electrical engineering. Abdullah has previously worked with data, gathering information to file reports on malfunctioning oil processing machinery at Saudi Aramco, the largest and most profitable entity in the oil and gas sector. He has also worked as a manager and interior designer at NewAge company in Saudi Arabia. Now, Abdullah is using his managerial and data collecting skills to excel in his role as a logistics manager, team design member, and manufacturing engineer in the Senior Design Project. Additionally, he is helping others in completing general tasks. Abdullah's hard skills include a strong understanding of Solidworks, Java, C++, MATLAB, and EES. He speaks Arabic as well as English. In his life outside of class, he joined multiple clubs and worked as a board member in the Muslim Students Association.

### Ben Piquard, CAD Engineer

Ben is a mechanical engineering student who oversaw all CAD related work of this project. He has an abundance of experience with the design process and CAD, along with a certificate in SolidWorks, and electrical industry experience. As the CAD Engineer on this project, he facilitated all the teams work in SolidWorks and helped move the team along the design process. Using the CAD model, Ben and the team were able to critically analyze the different iterations of the project and make the necessary design decisions to create the best possible project for our clients. Over the duration of the project, Ben also developed drawing packages and renderings to be displayed to the AlloSource and our professors that would guide the manufacturing and development of the final project.

#### Evan Blake, Financial Manager

Evan is a mechanical engineering student with a strong command in manufacturing, design, and project management. He has over two years of industry experience developing project scopes, schedules, and investment grade cost estimates. Evan forecasted the spend and tracked the budget throughout the project, as well as helping with manufacturing. He is expecting to

graduate in May 2020 and will start work in Littleton, CO as a Project Engineer for Johns Manville.

# **Grant Hupp, Manufacturing Engineer**

Grant is a mechanical engineering student with a certificate in engineering leadership and oversaw the fabrication processes for this project. He has over 2 years of industry experience in manufacturing, testing and project management which suited the position as Manufacturing Engineer well. Grant currently serves as the Director of Academic relations for the University of Colorado Engineering Council and has worked for the intramural program at CU throughout his time there. Some of Grant's main contributions to the project include managing the fabrication of components, member of the projects design team and finding proper materials and manufacturing processes needed for the components both bought and manufactured.

## Jared Moya, Systems Engineer

Jared has industry experience with both mechanical design and analysis, along with electronic systems validation. He also currently works as an Engineering Support Student at the Integrated Teaching and Learning Laboratory on the CU Boulder Campus where he provides technical support to students working on personal and academic projects that involve multiple systems. Jared can understand the big picture and how different systems should work in conjunction with one another. Jared has helped integrate the sub-system of this project to create a functional device. He has managed the specifications of the project and has been in communication with AlloSource to ensure that the clients needs are satisfied. Jared has worked on documentation to mitigate potential failure within the project and has taken the lead during the testing and validation phase. Jared is scheduled to graduate in May 2020 with a B.S. in Mechanical Engineering and a minor in Business Innovation. Jared plans on moving to Fort Worth, Texas this summer to work as a Systems Engineer for Lockheed Martin Aeronautics.

# Nebiyu Tadesse, Test Engineer

Nebiyu Tadesse is a Mechanical Engineering student whilst also double majoring in Electrical and Computer Engineering. He has industry experience in mechanical design, electrical design, software engineering, and large data analysis. In addition to industry experience, he's also worked in the Integrated Teaching and Learning Laboratory, ITL, at CU Boulder for the past 4 years as an Engineering Student Support for the hands-on design courses where he provided technical support in all aspects of student needs. Nebiyu is one that can understand the full picture, from mechanical design to embedded software implementation. He has been serving the team as the main Electrical and Software Engineer, contributed in the mechanical design of the project, and coordinated tests with the system's engineer to make sure that all specifications are being met. He will be graduating this may with two Bachelors of Science degrees and hopes to have a future in the field of robotics.