

Name

firstname.lastname@gmail.com • Phone Number • [Linked In Profile](#) • Location

Summary

Mechanical Engineer with strong experience leading and working in multidisciplinary teams to oversee the design and procurement of critical equipment in the petrochemical field. In my time at Current Company, I have delivered over \$4 million in cost savings while improving project schedule, safety, and system reliability.

Experience

Mechanical Engineer Program Lead

Large Petrochemical Company

June/2018 – Current

Location

- As an Associate Engineer, Mechanical Engineering Lead, and finally a Mechanical Program Lead, led a cross-functional team of hardware engineers and worked with vendors to develop a scalable and modular system for Company's \$220 Million Flare Gas Recovery Program.
- This system design and program approach delivered over \$3 million in cost savings while improving program schedule, safety, reliability, operability, and operating costs.
- Collaborated with project team and SMEs to develop a solution to condense 9 lb/hr of MCB vapor in a new plant using a small chiller. Overall, we reduced flaring, eliminated \$250k in vessel jackets, and kept to the original project schedule by keeping the existing air permit.
- Working as the primary point of contact, built project plan and managed the internal review and design process for rotating equipment. Received strong commendations for overall performance.
- After analyzing our mechanical spec development work process, independently built set of spec tools in Excel using VBA that saves ~100 hours of work per user, per year, for department of ~75.

Research Assistant & Master's Thesis

School Robotics Lab

May/2016 – May/2018

Location

- Developed control system and built test bench for prototype robotic variable stiffness actuator using MATLAB, Vicon, and C++. Published work in MDPI Actuators journal and in Thesis.

Senior Design Project

Local Feed Mill

Jan/2016 – Dec 2016

Location

- Spearheaded project to design, analyze and build a semi-automated sack closing conveyor system that reduced operating labor by 33%, doubled production speed, and cut operating costs by 20%.

Production Enhancement Engineering Intern

Large Oilfield Services Company

June 2015 – Aug 2015

Location

- Designed 3 options for faster, safer and cheaper diverter agent drop system.

Technical Skills

General: VBA, Matlab, Basic C++, Microsoft Office Suite, Cura, Adept, Zygad, Basic SAP, 3D Printing

CAD/FEA: SolidWorks, ANSYS Workbench (Structural, Fluent), ANSYS Aim

Education

Engineering University (*ABET Accredited*)

Master of Science, Mechanical Engineering (*Robotics and Controls Focus*)

2016 - 2018

Bachelor of Science, Mechanical Engineering

2012 – 2016