

GAGE D. KING

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Top performing, dedicated Mechanical Engineering Student-Related experience includes:

- ❖ *Proficiency in software programs such as MATLAB, MATHCAD, 3-D printing, Solidworks, and OpenVSP.*
- ❖ *Completed college courses in Dynamics, Fluid Mechanics I & II, Machine Design, Mechanics, and Materials, Heat Transfer, Thermodynamics I & II, and more.*

EDUCATION

Northern Arizona University, Flagstaff, AZ — B.A. Mechanical Engineering / 3.0 GPA

Expected Graduation: Winter 2022

PROJECT EXPERIENCE

Solar UAV Design (Team Sol Avem) | Spring 2022

ME-476C, Northern Arizona University

- This capstone projects main constraints are to design an aircraft that has a successful flight from takeoff to landing and to be supplied energy by solar panels integrated into the aircraft.
- A \$1500 fund is supplied to the team, provided by NAU and Gore, in order to develop a new concept of a solar powered unmanned aerial vehicle that will fly 1.5 times longer than the battery life. The extra energy will be supplied by the solar panels.
- The main engineering requirements include cost, thrust, aircraft mass, flight time, repairable/reusable, operating radius, solar energy harvest, cargo capacity, and safety.

Electric School Bus Design | Fall 2021

ME 386W, Northern Arizona University

- Objective was to develop a unique design for an electric school bus with any logical choice of fuel source that is renewable. Focuses were safety and environmentally friendly approach to attract school districts.
- Identified the clients and stakeholders for this project. Developed a QFD, decision matrix, Pugh Chart, engineering analysis, etc.
- Main fuel source was two electric batteries attached to the bottom of the bus, resulting in a sleek body frame for safety/style. Created a SolidWorks assembly of the Electric School Bus.

Gear Design Project | Fall 2021

ME-365, Northern Arizona University

- The idea of the project was to create a gear assembly with four total gears and three total shafts with freedom of using any material, gear ratio, and finish to the assembly.

- Final Report detailed individual gear and shaft summaries, SolidWorks drawings of all components, and calculations for the factor of safeties for the gears and shafts. Project Team used the AGMA Gear Analysis approach to solve for the factory of safeties.

WORK HISTORY

Pro Associate (prev. Cashier & Plumbing Associate) | February 2018 - Present

The Home Depot, *Littleton, CO* and *Flagstaff, AZ*

- Provides exceptional customer service to guests by determining their needs and making informed recommendations on available products, driving customer acquisition.
- Retains complete, current knowledge of a variety of subjects relating to home improvement. Including extensive expertise on products, Pro loyalty programs, available services, and in-store promotions.
- Fully trained in the operation of industrial equipment including forklift, reach, pacer, order picker, and EPJ. Routinely demonstrates ability to lift 100+ lbs. safely and effectively, as well as the ability to stand for long periods of time.

LEADERSHIP EXPERINCE

Eagle Scout Rank | December 2017 – Present

- Lead my Eagle Scout project partnered with a charity program called ‘New Born’s in Need’ associated with Denver Health Foundation.
- The program creates goodie bags containing diapers, bibs, blankets, clothing, etc. Each bag has around \$60 worth of baby supplies.
- I orchestrated donations and with the help from Troop 43 we created 60 girl and 60 boys goodie bags, raising a little over \$6000.

References upon requests