

# BENJAMIN J. PLIS

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## QUALIFICATIONS SUMMARY

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|---------------------|------------------------|-----------------------------|
| ✓ Microsoft Office  | ✓ CAD/CAM Software     | ✓ SolidWorks                |
| ✓ Fusion360         | ✓ MATLAB               | ✓ Excel                     |
| ✓ CNC               | ✓ G-code               | ✓ Mill and lathe Experience |
| ✓ Technical Writing | ✓ Communication Skills | ✓ Analytical Skills         |

## EDUCATION

NORTHERN ARIZONA UNIVERSITY  
(Current GPA of 3.1)

*B.Sc. Mechanical Engineering (Expected graduation May 2022)*

- Relevant Coursework: Materials Science, Applied Mechanics Statics, Engineering Design Process, Computer-aided Design, Mechanics of Materials, Machine Design, Machine Design II, Manufacturing Processes, and associated lab
- Extracurricular Activities: Member of the Theta Tau engineering fraternity, SAE Club, machine shop volunteer, avid student of History, skeet shooting team, collector of military/historic artifacts

## PROFESSIONAL EXPERIENCE

CAPSTONE PROJECT – EBAJA VEHICLE

*August 2021 – May 2022*

- Gathered information from current Baja team members and gathered CAD files, Baja and eBaja documents including the rules and regulations for the competition and collected reference sources for the recreation of absent parts including brake and suspension systems.
- Established communication with sister teams and handled the acquisition of the frame and existent components for the project as well as securing suitable spare parts from other SAE teams.
- Assisted CAD lead in recreating lost CAD files and modifying existing files.
- Assisted the team in the experimental portion of the project, in charge of testing parts and prototypes. This includes function tests, stress tests, and testing of the prototype through speed, maneuvering, and endurance testing.
- Lead the team in the fabrication and mounting of parts that were missing from the original vehicle

CLEAN ENERGY POWERED PORTABLE DESALINATOR PROJECT

*January – May 2021*

- Created CAD package for the project's conventional fossil fuel back up power source. This includes CAD modeling of the diesel motor, the generator cage, fuel tank, electric motor, control panel, and plug sockets and creation of associated assemblies, drawings, exploded views, and BOM.
- Successfully completed research on power requirements for the system and pump specifications appropriate for employment both within the system itself and on-site when the system is deployed.
- Acted in tandem with another team member to analyze, edit, and improve team reports.

FRY'S FOOD AND DRUG, GLENDALE, AZ

*Courtesy Clerk, Mar 2015 – Aug 2019*

- Utilized hazardous chemicals for the purpose of cleaning and sanitation in employee/customer facilities.
- Executed quality control duties by inspecting products and packaging for spoilage or damage.
- Amicably worked with disgruntled customers and other employees to resolve issues or misunderstandings.