

Andrew J. Bare

ajb20@rice.edu | (712-363-5014)

Education

Rice University Houston, Texas

B.S. Mechanical Engineering GPA 3.34

Anticipated graduation May 2024

Experience

Ground Systems Lead **Rice Eclipse** Rice University, Houston, TX

May 2021 – Present

Member

September 2020 – Present

- Lead several engineering projects to design a new flame diverter for mobile engine test stand and oxidizer supply system for team static testing projects
- Assemble and check oxidizer supply equipment for all Eclipse engine tests
- Prototype and assemble physical components of electronic testing and data acquisition platform (ARCA)
- Improve cost, efficiency and value of static testing procedures through broad knowledge of team infrastructure
- Built and launched personal rocket for Tripoli L1 certification

Lab Assistant **Rice University OEDK**, Houston, TX

August 2021 – Present

- Assist Oshman Engineering Design Kitchen (OEDK) users in advanced equipment including 3D printers, laser cutters, and metal tools
- Track and manage OEDK consumable inventory for over 1000 students and more than 100 teams
- Improve OEDK facilities through consistent maintenance and laboratory upkeep

Employee **Century Farms Distillery** Spencer, IA

May 2016 – August 2021

- Assembled PVC, copper and PEX piping/tubing for custom-made still and cooling water system
- Integrated IP security camera system over three buildings with network video recorder
- Mixed and fermented whiskey mash for distillation

Go Kart Lead **Arnolds Park Amusement Park** Arnolds Park, IA

May 2020 – September 2020

Go-Kart Operator

Summer 2018 and 2019

- Lead and supervised team of 12 to run up to 1100 go-kart rides per day
- Implemented COVID-19 preparedness policy in compliance with state, county and city regulation
- Performed maintenance and repairs on kart engines, frames and bodies

Leadership

Senator **Rice Student Association** Rice University/Hanszen College

March 2021 - Present

- Work to improve and expand dining options after and between hours for all students
- Advocate for increased academic and mental health support for students during COVID-19 pandemic
- Act as liaison between students and administration for a broad range of issues and concerns
- Collaborate with others to improve student life

Technical Skills & Coursework

Software & Languages

Microsoft Office, SolidWorks, Autodesk Inventor and Fusion360, Adobe Illustrator, Wolfram Mathematica, MATLAB, Python, TK Solver, RStudio, Git, Inkscape, GIMP, OpenRocket

Tools & Related Skills

Sheet metal work, technical writing, 3D printing (Prusa FDM & SLA, Formlabs SLA, Stratasys), Laser cutter (Epilog), waterjet, woodworking (miter, panel and table saws, drill press), MIG welding, soldering