# Ajay KR Mohan

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## Education

Oregon State University, Corvallis, OR – BS Mechanical Engineering, BS Manufacturing Engineering, Focus in Product Development. **Sep 2015 – June 2020 Honor Roll Winter 2020**

**Upper Level Course Work:**

- Materials Science
- Mechanics of Materials
- Thermodynamics
- Fluid Mechanics
- Heat Transfer
- Mechanical Component Design and Analysis
- Electrical Circuit Design and Analysis (DC/AC)
- GD&T and Fixture Design
- CAD / CAM
- Instrumentation and Measurement Systems
- Lean Manufacturing
- Systems Dynamics and Controls
- Manufacturing Production and Processes
- Design for Manufacturing
- Intermediate Dynamics

## Relevant Experience

- **AIAA OSU Design Build Fly** **June 2019 – April 2020**
  - ***Aerodynamics and Structures Student Engineer, Program Manager, Safety Lead***
    - Tasked with designing a fully electric powered UAV RC aircraft that could carry a payload and deploy a stowed banner mid-flight.
    - Led the design and manufacturing of the aircraft's fuselage. Collaborated on wing airfoil selection, wing design, symmetrical airfoil empennage design, and stability analysis.
    - Designed, prototyped, and analyzed our aircraft to optimize a design and manufacturing process in order to meet our customer's requirements.
    - Composites manufacturing and analyses.
    - Worked with an interdisciplinary team to collaborate on this student led capstone project to create a successful, competitive aircraft and to present our final product/results to our peers.
- **Thermo Fisher Scientific, Bothell, WA** **June 2019 – September 2019**
  - ***Mechanical Engineering Intern***
    - Designed tools/fixtures to increase quality and manufacturability.
    - Worked directly with senior engineers to extensively test/troubleshoot various product issues.
    - Created and implemented design requests/changes, brief experience with PDM.
    - Prototyping various design changes.
    - Worked in a cross-functional team to help improve day to day operations.
    - Redesigned electro-mechanical subassembly to increase manufacturability.

## Technical Skills

- Proficient in SolidWorks, Siemens NX, MATLAB / SIMULINK, Microsoft Office Suite, Arduino, LaTex, AutoDesk Helius Composite Analysis, Finite Element Analyis (FEA) modeling and simulation, Basic Python knowledge
- Machining (Mill, Lathe, Presses, CNC operation, G-Code creation), Composites Manufacturing
- Expert at 3D printing, 3D CAD, 2D documentation and rapid prototyping

## Affiliations/Organizations

- AIAA Design Build Fly (DBF) Capstone team, Aero and Structures Sub-team, Program Manager, Safety Lead
- Oregon State Pi Kappa Alpha, Beta Nu chapter, Founding Father, Scholarship Chairman (elected by peers)
- IISE Six Sigma Green Belt Certified 11/02/2019 (#14035225)

## Strengths

- Strong interpersonal communication, problem solving, and analysis skills
- Ability to prototype designs and create tests to prove validity
- Knowledge of engineering materials, processes, and testing
- Ability to work in a cross-function team and collaborate on large projects
- Result driven with strong attention to details and the ability to learn new skills quickly

## Reference

- Dr. Nancy Squires, Professor and Capstone Project Advisor: squiresn@oregonstate.edu