

Education

UNIVERSITY OF ILLINOIS AT CHICAGO, Chicago, IL
Bachelor of Science - Mechanical Engineering, Senior

Expected graduation: May 2025
GPA: 3.95/4.0

Work Experience

CNH Industrial | Oak Brook, IL | *Mechanical Product Design Engineering Intern* Mar 2023 – Present

- Eliminated a \$76k/week service issue by redesigning axle assemblies for 16 tractor variants, transitioning from shim-based preload adjustments to lock nuts and ultimately coming up with 5 unique designs.
- Improved transmission lube path accuracy by 67% via Siemens Amesim models, streamlining lubrication analysis.
- Led the design of several prototype hydraulic components in Creo for CNH's new Magnum Tractor transmission.
- Collaborated with suppliers for DFM of cast and machined parts as well as CNH factory for DFA on prototype.
- Published 76 GD&T-compliant drawings and developed statistical models to address assembly failures.
- Partnered with project managers to monitor and ensure all prototype parts are delivered & designed on time.

S&C Electric | Chicago, IL | *Contract Mechanical Engineer* Sept 2024 – Present

- Leading team of 4 to develop an FEA model along with validation fixture, optimizing S&C's Vacuum Interrupter.
- Delivering a dynamic model with customizable variables for enhanced flexibility and scalability by May 2025.
- Conducting experiments on Vacuum Interrupter design to collect data to feed into a robust MATLAB algorithm.

TESLA | Fremont, CA | *Mechanical Engineering Intern* Sept 2023 – Dec 2023

- Led the design of 2 fixtures from scratch and worked with 5 other engineers on process improvements to enhance ultrasonic sensor bracket adhesion on Falcon doors, contributing to projected savings of \$2.2M/year.
- Deployed 21 projects, and 15 original CAD designs (CATIA) with 150+ iterations in four months.
- Built and designed fixtures from scratch using 3D-printing for rapid testing and delivering proof-of-concepts.
- Performed tolerance analysis to resolve design issues from previous interns, ensuring precise component fits.
- Worked cross-functionally to complete projects outside the process team, gaining comprehensive experience.
- Familiar with critical processes such as CNC, injection molding, stamping, anodizing, and adhesives.

Hydro Inc. | Chicago, IL | *Mechanical Design Engineering Intern* Jan 2023 – May 2023

- Elected by lead engineering manager to lead fellow interns to create first drafts of engineering design reports involving various stress calculations for nuclear pumps and work to confirm results using finite element analysis.
- Authored assembly instructions for nuclear pump systems, improving clarity for technicians and operators.

Reishauer | Elgin, IL | *Mechanical Design Engineering Intern* Sept 2022 – Dec 2022

- Created 3-D models using AutoCAD and showcasing products such as gears, grinding wheels, gear grinding fixtures, and thread gauges to potential customers in the gear grinding industry.
 - Designed and 3D-printed grinding wheel thread gauges, reducing costs from \$300 to \$5 per unit.
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Projects

UIC Engineering Design Course | Chicago, IL | *Mechanical Design Engineer* Jan 2024 – May 2024

- Led a team of 5: organized meetings, delegated tasks, aided teammates to complete tasks such as creating a bill of materials, functional analysis, design matrix along with delivering a technical presentation and memo leading to a grade of 100% and 1st place out of 160 engineering students.

UIC Engineering Design Team (Drone) | Chicago, IL | *Mechanical Design Engineer* Aug 2021 – May 2022

- Designed landing gear and supported drone upscaling using SolidWorks, validating strength via FEA simulations.