ALEX HA

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LinkedIn

EDUCATION

Kennesaw State University | *BS in Mechanical Engineering*
GPA: 3.3/4.0 | Expected Class of 2029
Relevant Coursework | *Engineering Design Graphics*

SKILLS

Technical Skills

- Solidworks (CSWA)
- GD&T, Tolerancing, and Technical Drafting
- Fusion 360
- Siemens StarCCM (CFD)
- Ansys Finite Element Analysis
- 3D modeling and manufacturing
- CNC milling & Lathing

PROJECTS & EXPERIENCE

Bruks Siwertell Americas ***May 2026 - Present***
Mechanical Design Intern

- **ESI Jesup Industrial Belt Conveyor Project**
  - Engineered 42-, 54-, and 60-in. inclined belt conveyor assemblies, including supports, trusses, galleries, chutes, platforms, guarding, idlers, and rollers, using SOLIDWORKS, member-sizing calculations, tolerance and interference analysis.
  - Developed revision-controlled fabrication and installation packages with detailed drawings, GD&T, AWS-compliant weld callouts, BOMs, and cut lists using SOLIDWORKS PDM and Excel.

Kennesaw Motorsports (Formula SAE)
Driver Interface Lead ***June 2026 - Present***

- Lead the design, integration, and validation of driver-interface systems while coordinating subsystem priorities and project execution.

Driver Interface, Aerodynamics Engineer ***July 2025- June 2026***

- **EV Instrumentation Dashboard Panel Development**
  - Developed a lightweight dashboard redesign by reducing the LED layout for a full color TFT display and optimizing the casing form factor, achieving a 20% reduction in total weight.
- **Aerodynamic Whisker Study**
  - Designed and executed a DOE on airfoil performance across chord, thickness, camber, and angles of attack, including multi-element configurations; validated results in **Simcenter STAR-CCM** via residual/y^+ and mesh-independence checks.

Gladiator Robotics 5109 (FRC) ***August 2021 - May 2025***
Climb Subsystem Lead

- Designed the 2025 climbing system, incorporating a spring-assisted barb-claw mechanism, gear ratio optimization, and a cable-operated winch actuation, culminating to the team's advancement to the quarterfinal stage in the Peachtree District/State Championship.