

Chance Shepherd

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EDUCATION

Iowa State University Ames, Iowa
Bachelor of Science, Mechanical Engineering

Expected Graduation: Spring 2028
3.2 GPA

WORK EXPERIENCE

Tesla, Austin, TX
Cell Engineering Intern – Electrode Reliability and Equipment

January 2026 – Present

- Designed custom parts using SolidWorks, optimizing equipment reliability and reducing downtime in cell manufacturing processes
- Developed a comprehensive Python-based dashboard to aggregate and analyze reliability data, enabling identification of critical issues and data-driven improvements
- Worked in highly controlled environments using enhanced PPE (PAPR) while following strict safety and contamination protocols
- Used AI coding tools (e.g. Claude Code) to support development, reliability analysis, and testing workflows
- Applied material engineering principles to evaluate material performance, durability, and failure modes during development
- Used thermography imaging to detect hotspots and analyze thermal behavior during hardware testing

Collins Aerospace, Cedar Rapids, IA
Industrial Engineering Co-op

January 2025 – August 2025

- Supported design and manufacturing efforts by creating and integrating components using advanced 3D printing technologies and SolidWorks on a daily basis
- Created and implemented specialized tools such as a nozzle remover and antenna mounting fixtures to reduce operator strain and simplify complex tasks
- Solved multiple complex problems with a recalibration of SCS systems, ensuring repeatability, functional reliability, and alignment with quality standards
- Rapidly prototyped engineering solutions under high-pressure work stoppage timelines, including the design and fabrication of alignment pins to ensure precise chassis assembly
- Worked hands-on with highly precise tooling and a wide variety of engineering equipment, gaining proficiency in fabrication, measurement, and mechanical assembly across diverse projects

Iowa State University, Ames, IA
MELTs Mechanical Engineering Peer Mentor

August 2024 – Present

- Lead a biweekly class of 20-25 first-year mechanical engineering students (ME 1900)
- Instructed students on excelling in exams, building professional resumes, and engaging with employers
- Advised students on effective time management, study strategies, and available university resources
- Conducted individual meetings with every student to address academic concerns and foster student development
- Participated in weekly staff meetings to enhance teaching skills and improve student engagement strategies

McLean County Highway Department, Bloomington, IL
Engineering Intern

May 2024 – August 2024

- Assisted in collecting and organizing field data for road maintenance and infrastructure improvement projects

LEADERSHIP AND ACTIVITIES

SAE EV Formula Team – *Powertrain Team Lead (elected position)*

April 2025 – December 2025

- Lead the design, manufacturing, integration, and testing of the electric powertrain system for Iowa State University's first Formula SAE EV race car
- Held a weekly meeting, and manage a talented team of engineers to develop high-voltage systems, motor integration, tractive battery assembly, BMS system, and drivetrain components
- Oversaw testing and validation processes to optimize performance, efficiency, DCIR cell characterization, and reliability of the EV powertrain
- Coordinated with other subsystems (aerodynamics, chassis, controls) to ensure seamless integration and compliance with FSAE technical regulations