Devon Reber

Mechanical Engineer

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Chicago, IL

Education

B.S. Mechanical Engineering
Texas A&M University // 2021 - 2025 (Ranked #1 university in USA for mechanical engineering research output[1])

Semester Study Abroad
Technical University of Denmark // 2023 (Ranked #1 university in Europe for mechanical engineering research output[2])

Distinctive Coursework
Advanced System Dynamics and Controls
Machine Learning for Mechanical Engineers
Computer Vision
Digital Electronics

Awards

1st in the World at Invent for the Planet
Won first place in a global engineering design competition involving teams from 15 countries.

Four-Time 1st Place at Aggies Invent
Won first place in four engineering design competitions hosted by Texas A&M University with a new team each time.

Two-Time 1st in Texas at TSA Teams
Won first place in Texas in two team-based rapid prototyping and engineering knowledge competitions. Also placed 2nd in the USA.

National Science Foundation Grant
Awarded $3000 from the National Science Foundation for the creation of a course to teach robotics fundamentals to high school students.

Experience

Autonomous Robot Senior Capstone
College Station, TX // 2024 - 2025
- Designed and fabricated 6ft long beach cleaning robot with custom electrical system and industrial 3D LiDAR.
- Created vision and LiDAR based control system for collision avoidance and navigation.
- Utilized Solidworks for structural design and stress analysis.

Prototyping Engineer Intern – Shure Inc.
Niles, IL // 2024
- Utilized DSP knowledge to support product development for leading professional audio equipment manufacturer.
- Significantly reduced software algorithm runtime while improving robustness and adaptability to real world conditions.
- Created procedures for calibration of prototype hardware.

Personal Consumer Electronics Project
College Station, TX // 2023 - 2025
- Designed and achieved low volume production of innovative digital synthesizers.
- Developed circuitry schematics, mechanical drawings, and embedded software.
- Reduced assembly time from 2 min to 15 sec while reducing part count and improving reliability.

Semiconductor Production Research Apprentice
Austin, TX // 2013 - 2022
- Mentored by an expert in the field of semiconductor manufacturing over the course of 9 years.
- Learned hands-on skills by repairing and maintaining complex mechanical and electrical equipment such as a high vacuum magnetron sputtering system.
- Supported design and development of systems to aid solar cell production research efforts.

Attributes

Adaptable
Leverage natural curiosity and hands on learning to rapidly master new topics.

Team Player
Collaborate effectively within diverse teams to consistently deliver top-tier results.

Innovative
Combine broad knowledge and first principles thinking to deconstruct complex problems.

[1]According to Shanghai Ranking 2021-2024
[2]According to Shanghai Ranking 2023

Skills

Hardware	Software	Programming
CNC Milling/Turning	Solidworks	Python
Sheet Metal	Fusion 360	C++
3D Printing	Inventor	Matlab
PCBs	Altium	Linux
Soldering	Multisim	OpenCV
Oscilloscopes	Blender	Git
Basic Hand Tools	Microsoft Suite	Jira
Servo Drivers		
ESP32-S3		
SICK 3D LiDAR		