

## Autonomous Vehicle Design CAT Robotics Capstone

Aug 2022 – May 2023

- Designed and 3D-printed custom vehicle chassis, including steering components and airless tires
- Created differential housing and modular drivetrain for four-wheel drive and independent suspension
- Integrated SONAR rangefinder and infrared sensors to implement obstacle avoidance and line following
- Applied Arduino C++ to create PPM-controlled mode selection and LCD information display

