

# KARTHIK KALIDAS

Fort Worth, TX ◊ 614-815-7623 ◊ [karthik.kalidas@gmail.com](mailto:karthik.kalidas@gmail.com) ◊ [Website](#) ◊ [LinkedIn](#)

## PROFESSIONAL SUMMARY

---

Technical leader with 6 years of experience delivering autonomous vehicle platforms from concept to deployment. Expert in HIL infrastructure, sensor integration, and large-scale test automation. Proven ability to execute and scale solutions, solve complex problems, and drive cross-functional team success.

## WORK EXPERIENCE

---

### Senior Systems Engineer, Test Automation

Jan 2025 – Present

*Torc Robotics, Dallas-Fort Worth, TX*

- Spearheading HIL validation roadmap across 5 autonomy teams, boosting system test coverage by 70%
- Leading team of 7 engineers, delivering 15+ features per release through efficient sprints and reviews
- Deployed fully automated robotic HIL test via CI/CD using temporal workflows, achieving zero-touch software flashing, mission validation, and mode engagement in under 20 mins
- Improved system HIL uptime and stability from 30% to 99% through proactive monitoring and fault isolation

### System Integration Engineer, Autonomous Driving Kit

Nov 2021 – Jan 2025

*Torc Robotics, Albuquerque, NM*

- Led rapid integration and deployment of autonomy platform in collaboration with Daimler Truck for mass production
- Developed patented sensor setup station for full sensor set configuration in under 12 mins with remote diagnostics
- Commissioned 4 vehicle generations with self-developed tooling, optimized workflows, and thorough documentation
- Spearheaded system issue troubleshooting, RCA, and resolution, resolving 100+ critical system issues

### Test Engineer, On-Road Testing

Jan 2021 – Nov 2021

*Torc Robotics, Albuquerque, NM*

- Deployed instrumentation, infrastructure, and sensor calibration as defined by vehicle test plans
- Tuned and optimized longitudinal and lateral controllers, reducing autonomous disengagements by 30%
- Led establishment of Torc's first test operations facility, building and training the test engineering team

## PUBLICATIONS

---

2025 - Systems And Methods For Automatic Sensor Configuration, 139906-05801

2025 - A Cloud-Based Platform For Automatic Sensor Configuration, 139906-08501

2021 - Simulation Framework for Testing Autonomous Vehicles, SAE Technical Paper [2021-01-0118](#)

## SKILLS

---

### Languages

C/C++17, Python, Go, Bash

### Tools/Framework

ROS1/2, TensorFlow, OpenCV, Vue.js, Bazel, MATLAB, CANape, SolidWorks

### DevOps

Linux, GitHub Actions, Jenkins, Terraform, Docker, AWS, Datadog

## AWARDS

---

2024 – Employee of the Quarter Q2, Torc Robotics

2021 – Employee of the Quarter Q1, Torc Robotics

2019 – Formula Student Award, IIT Bombay Racing

2018 – Institute Technical Citation, IIT Bombay

2015 - All India Rank 606, JEE Advanced

## EDUCATION

---

### The Ohio State University, Columbus, OH

Dec 2020

Master of Science, Mechanical Engineering

GPA: 4.0/4.0

### Indian Institute of Technology (IIT) Bombay, India

Aug 2019

Bachelor of Technology, Mechanical Engineering

CPI: 8.4/10.0