AJITH KUMAR CHALLA

864-901-6718
ajithc@g.clemson.edu

EDUCATION:

2019-present   Clemson University-International Center for Automotive Research
First year Master's student in Automotive Engineering

Courses taken:
- Automotive Systems Overview
- Automotive Electronics
- Control Systems Engineering
- Automotive Business Concepts
- Vehicle Dynamics

2014-2018   VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad
B.Tech in Automobile Engineering   CGPA: 7.52

WORK EXPERIENCE:

IIT Madras-Lockheed Martin Corporation   Dec 2018- Mar 2019
Position: Project Associate in developing a unique Cargo handling vehicle.
Software: Solidworks
- CAD Modelling of Components for Powertrain and Air Suspension Testing.
- Assisted to develop test plans for Air suspension static and dynamic compression testing.

PROJECTS:

Signal processing, sensor fusion and localization using ultrasonic sensor   Nov 2019
Software: Arduino
- Implemented Kalman filter for signal processing and sensor fusion.

Autonomous lane keeping and Adaptive cruise control of RC car   Nov 2019
Platform: Arduino
- Iterated with various controllers P, PD, PI and PID. Implemented PID among all based on system stability.

Formula Student: Oct 2015– Jan 2017
Position: Suspension design engineer and Technical lead.
Platform: Solidworks, Optimum Kinematics, Matlab, MS Excel.
- Led a team of 5 members which had worked on design of Double A-arm Pullrod and Pushrod suspension using tire testing data for a Formula student race car.
- Calculated damping coefficients and designed springs and anti-roll bars.
- Rack and pinion Steering mechanism design using Matlab.

Jayem Automotives Pvt. Ltd. & JA Motorsport, India: Jan 2017
- Fabricated the car and tested lap timings for various dynamic events of Formula student race car.

Supra SAE India: May 2017-Jun 2018

> **Position:** Vice-Captain of 25person team, Engine Intake system designer.

- Designed Air intake manifold for a restricted KTM 390 engine.
- Authored Design report for the competition and managed day to day activities in the team

> **Platform:** ANSYS Fluent, Ricardo Wave 1D simulation

TECHNICAL SKILLS:

- Modeling Softwares   :   Solidworks, PTC Creo, AutoCAD
- Analysis Softwares   :   Ansys, Optimum Kinematics, Ricardo Wave
- Other tools   :   Matlab, Simulink, Arduino

EXTRA CURRICULAR ACTIVITIES:

- Vice chairman of SAE-a collegiate club.
- Vice-Captain of Formula Student team for Sep 2017-Jun 2018.
- Technical Lead of Vehicle dynamics department (Fierce Formula India) for 2016-2017.
- Design Engineer at Formula student team (Fierce Formula India) for 2015-2018.
- Volunteered for Nitro Turf remote car race event in Hyderabad in December 2015.

INTERESTS AND HOBBIES:

- Reading novels.
- Watching cricket, Formula 1 and television series.