

Vibhor Aggarwal

Master's Student, Automotive Engineering **RWTH Aachen**

24 February, 1996 (24 Years)

Bayernalle 7, Aachen, Germany (+49)17659896222

vibhoraggarwal.github.io

vibhor.aggarwal@rwth-aachen.de

Skills* C++. C

Matlab, Simulink

CAD(Solidworks, Autodesk Inventor)

ROS, YARP

FEA(Ansys, Abaqus)

Gazebo 3

Languages* English

Hindi

German

3.5

Italian

2

*Scale 1:Beginner to 6:Proficient

Projects' Photos & Videos -



Summary

Automotive engineer with experience in cutting edge research on robot and vehicle dynamics. Interested to work in the field of Advanced Driver Assistance Systems, Automated Driving, and Electromobility

[Education]

M.Sc. Automotive Engineering RWTH Aachen, Germany

B.Tech, Major: Mechanical Engineering

Minor: Applied Mathematics

Indian Institute of Technology Kanpur(IIT), India

[Achievement and Awards]

Best Under-Graduate project in Mechanical Engineering: IIT Kanpur 2017 Ranjan Kumar Memorial Award for best socially relevant project: IIT Kanpur 2017 Ranked 3rd in state and 914th nationally among 1.4 million students in JEE 2013 Gold Medal in National Mathematics Olympiad: AISMTA 2013

Experience

Student research assistant C++ Simulink **♀** Germany May 2019-Mar 2020 Institute of Automatic Control, RWTH Aachen, Germany

- Creating a C++ framework using inter-process-communication via UDP
- Data acquisition and time synchronisation among IMU and GNSS sensors

Research Fellow, C++ Gazebo Simulink YARP **Q** Italy Nov 2017-Aug 2018 Guide: Dr. Daniele Pucci, DIC lab Research center for Human-Robot Collaboration Italian Institute of Technology, Genova, Italy

- · Implemented low level torque control framework for Humanoid robot, iCub
- Identified transfer function between Voltage and iCub's joints' torque

Graduate Engineer Trainee MS Excel TPM Hero Motocorp Ltd, Haridwar, India

♀ India July 2017-Oct 2017 World's largest two-wheeler company

Sep 2018-Present#

July 2013-June 2017

- · Managed TPM for machine quality, process inspection and resource planning
- Produced machined parts by programming and setting up the CNC machine

♀ India Intern, Mechanical Design Engineer CAD FEA May 2016-July 2016 Grey Orange Robotics Pvt. Ltd, Gurugram, India Warehouse Automation firm

- Designed suspension system of a material handling Automated Guided Vehicle
- Optimized assembly using Design for Manufacturing and Assembly techniques

Projects

Robotic Exoskeleton Arm CAD FEA Matlab Guide: Dr. Sumit Basu, IIT Kanpur, India

Aug 2016-April 2017 Best Under graduate project at IIT Kanpur

- Developed Pnematic Air Muscles (Proportional pressure pneumatics)
- Provided improved mobility to people in old age and Cerebral Palsy patients

Off-road Vehicles CAD FEA Matlab Dec 2013-Jan 2016 Guide: Dr. Avinash Kumar Agarwal, IIT Kanpur For Event similar to FSAE & Baja SAE

- Created/optimised mathematical models for multi link suspension systems
- Rated as one of top 5 teams for design from more than 45 national teams

Additional Information

- Led the Motorsports team at IIT Kanpur, with more than 25 members.
- Interested in Abstract expressionism, Philosophy, Psychology, Hiking

Last updated: May 31, 2020

