

Vibhor Aggarwal

Master's Student, Automotive Engineering RWTH Aachen

24 February, 1996 (24 Years)

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Skills* C++, C

5

Matlab, Simulink

5

CAD(Solidworks, Autodesk Inventor)

5

Protobuf, OSI, FMI

1

ROS, YARP

4

FEA(Ansys, Abaqus)

4

Gazebo

3

Languages* — English

Hindi

6

German

3.5

*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 Electro-mobility.

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

ADAS simulation Engineer C++ FMI Protobuf • Germany June 2020-Present# ETAS GmbH, Stuttgart, Germany Bosch subsidiary for Embedded system support

- · Logging OSI messages using FMI, in COSYM, a co-simulation software
- Generating FMU models, using C++ Protobuf library for ADAS SiL simulation

- Created 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 ♥ 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

Q 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

· Designed suspension system of a material handling Automated Guided Vehicle

Projects

Robotic Exoskeleton Arm CAD FEA Matlab

Aug 2016-April 2017

Guide: Dr. Sumit Basu, IIT Kanpur, India

Best Under graduate project at IIT Kanpur

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

Additional Information

- Led the Motorsports team at IIT Kanpur, with more than 25 members.
- Interested in Cycling, Kung fu, Salsa, Abstract expressionism, Philosophy,

Last updated: September 28, 2020