Contact

www.linkedin.com/in/satvik-sabarad-838389113 (LinkedIn)
m.facebook.com/satvik.sabarad (Personal)

Top Skills

Automotive
Research
Project Management

Languages

Hindi (Native or Bilingual)
English (Full Professional)
Kannada (Native or Bilingual)

Certifications

Introduction to Aerospace Structures and Materials
Hands on introduction to engineering simulations
Electric Cars - Introduction and Technology

Honors-Awards

Token of Honourarium
Academic Excellency Award
Best Paper Award (IEEE CompE Conference 2020)

Publications

S. Sabarad, S. Sanyal. "Establishing an optimal eco-driving strategy for an electric vehicle through testbed simulation: A case study from Shell Eco-Marathon". IEEE SCES 2019

S. Sabarad, R. Singh. "Usage of foldable electric bike for first and last mile solutions" Indian International Science Festival, 7-11th Dec 2016 CSIR-National Physics Laboratory, Delhi

N. Adak, S. Chetri, S. Sabarad et al. "Direct observation of

Satvik Sabarad

BEML Limited | Electric Vehicles
Raipur

Experience

BEML LTD.
Executive Engineer (Manufacturing)
July 2019 - Present (1 year 2 months)
Bengaluru, Karnataka, India

I work in BEML Ltd., a public sector company under Ministry of Defence, GoI. My current responsibilities include:

1. Managing the production of hydraulic cylinders used in bulldozers and electric excavators for commercial as well as Indian defence purposes
2. One of the four people on the shop floor to manage around 60 technicians and 20 machines with the annual turnover of #23Crs (~$3M)

Learnt about the following:
Product costing | Make or Buy decisions | Various operations on shop floor | Discrete Event Simulation | Capacity Planning and Utilisation

Indian Institute of Science (IISc)
Summer Research Intern (CAR Lab)
June 2019 - July 2019 (2 months)
Bangalore

Worked under the guidance and supervision of Prof. Anindya Deb, FNAE, SAE Fellow | Center for Product Design and Manufacturing.

1. An estimation of hydrogen fuel cell stack size for electric vehicle applications
2. Estimation based on polarisation curve predicted by finite element model in COMSOL multiphysics and experimental/simulation results stated in literature

Council of Scientific and Industrial Research
Research Intern, Central Mechanical Engineering Research Institute
May 2018 - July 2018 (3 months)

1. Finite element modeling of Carbonfiber/epoxy compositelaminate in ACP (Pre) - ANSYS

2. Stress and deformation analysis, Damage prediction, and criticalply prediction in ACP (Post) -ANSYS and validation of experimental results

micro delamination in graphene oxide incorporated carbon fiber/ epoxy composite via in-situ tensile test". Composites Science and Technology, Elsevier.

S. Sabarad, S. Gupta. "Quantification of regenerative braking energy in a two-wheeler incorporating various duty cycles" IEEE CompE 2020

3. Hands-on experience in the manufacturing of Aramid/Kevlarcomposite plates for a Mob Control Vehicle (MCV)

Shell Eco-Marathon, Asia (Singapore '18)
Co-founder and Team Manager, Team ASTRA
June 2017 - May 2018 (1 year)
Shell Eco-Marathon Asia, Singapore

Design and development of energy efficient electric vehicle for Shell Eco-Marathon Asia:

1. One of the top 123 teams across Asia to qualify for the final phase of the competition

2. Worked on various mechanical and electrical counterparts, starting from the conceptual design stage to implementation stage

Indian Institute of Science (IISc)
Summer Intern (IDeaS Lab)
May 2017 - July 2017 (3 months)
Bengaluru, Karnataka, India

Centre for Product design and Manufacturing | Design Methods | Innovation and Sustainability in Design

1. Our team was responsible for InDeaTe 2.0 (A knowledge-driven sustainable design process support tool)

2. Study and implementation of design methods according to the life cycle phases as well as various design stages of product development

BAJA SAEINDIA
Vehicle Dynamics Member
May 2016 - February 2017 (10 months)
NATRAX, Indore

Design and development of an All-Terrain Vehicle:

1. Design of the steering mechanism considering the dynamics of the vehicle including various parameters

2. Secured 7th/192 teams in cost and weight reduction in the components of steering and wheel assembly

Education

National Institute of Technology Raipur

B. Tech, Mechanical Engineering · (2015 - 2019)

Jawahar Navodaya Vidyalaya, Raipur

· (2013 - 2015)

Delhi Public School, Raipur

· (2012 - 2013)