

Robin Sachdeva

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Registration No: B.Tech./ME/17109058/2021

National Institute of
Technology (NIT),
Jalandhar



Education

Degree/Examination	Institution/Board	CGPA/Percentage
National Institute of Technology (NIT), Jalandhar	Bachelors of Technology in Mechanical Engineering	7.0
B.S.M Sr. Sec. School	12th (P.S.E.B)	87.8%

Skills

Languages C++, C, JavaScript, Python, Data structure and algorithms, HTML/CSS

Technologies Flutter(Android), NodeJs, ExpressJs, GraphQL, MongoDB, SQL, DBMS, Docker, AutoCad(Solidworks), Ansys

Internships

Summer Internship - Software Development | Vieuth

april - may'20

- Built the Complete Authentication System which includes user registration, user Verification, Login/logout, forgot/reset password.
- Technologies used - NodeJs, ExpressJs, GraphQL, MongoDB, and JWT tokens.
- Developed the CRUD application to create a new Project on Vieuth's website with admin's authorisation.

Summer Internship | TBRL, DRDO, Chandigarh

june - july'19

Design of Single Stage Gas Gun-

- Objective was to calculate *pressure required* to be maintained in the chamber of a single stage gas gun for a desired muzzle velocity and specified barrel length.
- Using equilibrium equations, a relation was formed between pressure and varying length of the barrel.
- A program(C++) was written to calculate the value of pressure using the relation formed.

Projects

Covid Tracker | Android(Flutter) Application

aug-sept'2020

- A Flutter based mobile application to track and analyze COVID-19 cases worldwide.
- Features: Worldwide COVID-19 data, Country-wise data, Realtime data search by country name.

Gift Sharing | Web Application

feb'2020

- Built a Web app where users can make their profile and add gifts to their profile and can share the gifts that he/she has bought for an occasion with their friends using their username.
- App was built using NodeJs, ExpressJs, PassportJs and MongoDB where the frontend was built using HTML/CSS, Javascript.

Student Formula Racing Car | Perianth Racing, NIT Jalandhar

sep 2017 - present

- Designed and analyzed the Structural Behaviour of the car's chassis during various maneuvers.
- Designed the intake manifold for a car to improve the supply of Air/Fuel Mixture to Engine Cylinders.

Structural and Thermal Analysis | Perianth Racing, NIT Jalandhar

jan- feb 2019

- Analysed Effects on Dynamic Components (Hubs, Uprights and CV-Shaft) of car during various maneuvers using simulation.
- Analysed the Thermal and Structural effects on car Disc Rotor and then chose customised material for its machining.

Blockage Detection in Pipelines | NIT Jalandhar

september 2017

- Proposed a model to detect blockages in pipelines which cannot be detected by human efforts.
- Remote Controlled Robot will detect the blocked site and will help to remove that blockage.

Achievements

- Winners in Best Innovative Idea Submission in INNOVESTA 2017, NIT Jalandhar's Innovation Club
- India Finals and Campus winners in Battle Of Oratory 2017 organized by Literary and Debating Society, NIT Jalandhar
- Qualified JEE-Advanced 2017
- Secured 4th rank in D.A.V Talent Search Scholarship Exam 2012
- 1st Runner-Up in State Level ABACUS Championship 2012
- Qualified for National Olympiad 2011

Positions of Responsibility

Member, Team Perianth Racing, Automobile Society

sep 2017 - present

Perianth Racing is a Team that builds *Student Formula Racing cars* where we have different departments to work upon. Here, firstly all the components are designed and then analysed using Simulation.

Member, Society Of Mechanical Engineering, NIT Jalandhar

2017 - 2019

SOME is a Society that constantly tries to foster technical activities on campus. Society also organises technical events during the annual technical test *Techniti*. We also held Workshops on Autocad.