



# Jatin Gehlot

Bachelor of Technology  
in Mechanical Engineering  
Indian Institute Of Technology, Ropar

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GitHub  
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## EDUCATION

Degree	Institute/Board	CGPA/Percentage	Year
Bachelor of Technology	Indian Institute of Technology, Ropar	7.19 (Till 6th Sem)	2018-2022
Senior Secondary	Rajasthan Board of Secondary Education	90%	2018
Secondary	Rajasthan Board of Secondary Education	78.6%	2016

## EXPERIENCE

- IIT Ropar** June 2021 - July 2021  
*Research Intern* Rupnagar, Punjab
  - Creating a Portal for Railway registration system using Graph Database for searching Algorithm.
  - Optimization of SQL table(in postgresql) for faster response of Database by creating Dynamic tables from back-end for different trains.
  - Creating GraphDB database with station as nodes created in Neo4j and apply GraphQL to implement searching Algorithm between two stations for any train relation.
  - Faster responsive React.js used as front and Node.js with Express.js used as back-end of server.
  - EXPOSURE: **Postgresql, Express.js, React.js, Node.js, GraphQL (PERNG)**

## PROJECTS

- Faculty Information Management Portal** Mar 2021 - Apr 2021  
*CS301, Viswanath Gunturi* Github
  - Developed a Full Stack Solution for Management of faculty information based on database system, that have individual login, password, Dashboard, specialized dashboard and can process leave application, project information management, hiring of Associates
  - Used PostgreSQL for building backend Relational Database and MongoDB for Faculty Portal
  - EXPOSURE: **SQL(Postgresql), Stored Procedures, Triggers, Node.js, EJS, MongoDB**
- Neural Network From scratch** Oct 2020 - Nov 2020  
*ME504, Manish Agarwal* Github
  - Developed Sequential Neural network Model from scratch without using predefined libraries
  - designed and used different activation functions like sigmoid, ReLu and Tanh
  - Implemented concepts of back propagation using cost function for model fitting
  - EXPOSURE: **Numpy, Pandas, Python**
- Optimized SUDOKU Solver** July 2020  
*Python Project* Github
  - Developed and implemented Sudoku solver based on Backtracking algorithm, Constraint satisfaction propagation and Forward checking.
  - Used domain restriction for each cell in Sudoku and applied Constraint satisfaction and successfully reduced computation by 80% for average case.
  - EXPOSURE: **Python**
- Graph Theory: Design and Implementation** Nov 2020 - Dec 2020  
*CS201, Puneet Goyal* Github
  - Implemented Dijkstra's and Bellman Ford algorithm using adjacency list for weighted graphs
  - Implemented Kahn's Algorithm to perform topological sort on Directed acyclic graphs, algorithm can also detect the graph cycles
  - EXPOSURE: **C++, Data Structures and Algorithms**

## TECHNICAL SKILLS

- Programming Languages:** C/C++, Python
- Web Development:** HTML, CSS, Javascript, Node.js, Express.js, React.js
- DataBase Managment:** Postgre(SQL), Mongoose(MongoDB), Noe4j(GraphQL)
- Softwares:** Solidworks, Ansys, VScode, Postman

## KEY COURSES TAKEN

- CSE & Maths:** Algorithm & Data Structure, DataBase Management System, Deep learning for physical systems, Operating Systems, Linear Algebra, Advance Calculus

## MISCELLANEOUS

- Robotics Club Member**, Build a Robot for Fury Road event in technical fest of IIT-BHU 2018-2019
- CodeChef**, 3 Star rating 2021