



# Sushil Kumar

Bachelor of Technology  
in Computer Science and Engineering  
Indian Institute Of Technology, Ropar

+91-7015804565  
2020csb1132@iitrpr.ac.in  
GitHub  
linkedin.com/in/sushil-khatana-3007aa236

## EDUCATION

Degree	Institute/Board	CGPA/Percentage	Year
Bachelor of Technology	Indian Institute of Technology, Ropar	7.5 (Till 4th Sem)	2020-2024
Senior Secondary	Indus Valley Public School	91.2%	2019
Secondary	Indus Valley Public School	10	2017

## PROJECTS

- **Utility Based Cache Partitioning** *April 2022 - May 2022*  
*Computer Architecture(CS204)* **Github**
  - Upgraded the code for replacement policy of caches and allow dynamic partitioning into the last level cache. Different traces were run on Champsim and results were improved.
  - It was a group project of 5 members.
- **Vending Machine** *Oct 2021 - Nov 2021*  
*Digital Logic and Design(CS203)* **Github**
  - Verilog was used to design the code for a vending machine. It takes a certain amount of money and returns a chosen product from the machine with a change.
  - It was a group project of 3 members.
- **Treaps Implementation** *Oct 2021 - Nov 2021*  
*Data Structures(CS201)* **Github**
  - An optimized data structure, using a combination of Binary trees and heaps.
  - Group project of 3 members
- **CUCU: A compiler you can understand** *April 2021*  
*Programming Paradigms and Pragmatics(CS202)* **Github**
  - A basic compiler using Lex and Yacc written in C++.Used basic grammar and Regex expressions.
  - Solo Project

## TECHNICAL SKILLS

- **Programming Languages:** C/C++, Perl, HTML
- **Others:** RISC-V, Verilog, Github, Linux

## KEY COURSES TAKEN

- **CSE & Maths:** Algorithm & Data Structure, Digital Logic and design, Computer Architecture, Programming Paradigms and Pragmatics, Discrete Math
- **Others:** Basic Electronics

## POSITIONS OF RESPONSIBILITY

- **Member,** Coding Club, IIT Ropar *Dec 2020- Ongoing*
- **Member,** Sports Club, IIT Ropar *Dec 2020- Ongoing*
- **Member,** Zenith Club, IIT Ropar *Dec 2020- Ongoing*

## MISCELLANEOUS

- **Achievement 1,** School Topper in 10th Boards *2017*
- **Achievement 2,** School Topper in 12th Boards *2019*
- **Achievement 3,** Jee advanced *2020*