


# NACHIKETH RAJ B R

+91-7975540803 | nachikethraj08@gmail.com |  [http://linkedin.com/in/nachiketh-](http://linkedin.com/in/nachiketh-raj-b-r)

raj-b-r- //github.com/nachikethraj Bengaluru, Karnataka - 560060

## OBJECTIVE

---

Final year Electronics and communication Engineering student with skills in Java, Python, c,c++(basics).Passionate about full-stack web development with strong problem-solving and software engineering abilities.

## EDUCATION

---

- JSS Academy of Technical Education** December 2022- Present  
*B.E. in Electronics and communication and Engineering* Bengaluru, India
  - CGPA: 6.6
- Mes PU College Malleswaram Bangalore** 2022  
*Pre-University Education* Bangalore
  - Grade: 71
- Chinmaya Vidyalaya Mandya** 2020  
*Secondary Education* Mandya
  - Grade: 84

## SKILLS

---

- Programming Languages:** C, C++, Python (Basics),
- Tools / Platforms:** Git, GitHub, VS Code, MATLAB , Arduino IDE, HTML/CSS

## PROJECTS

---

- Project A: [Smart Blood Oxygen Level Detector]**
  - Designed a wearable device integrating an SpO<sub>2</sub> sensor (like MAX30100/MAX30102) to monitor blood oxygen saturation levels in real-time.
  - Developed embedded firmware using Arduino IDE to collect photoplethysmographic (PPG) signals and calculate SpO<sub>2</sub> using signal processing algorithms.
  - Implemented a basic display and alert system, showing real-time oxygen levels on an OLED screen and triggering alerts if values fall below a threshold, promoting early health intervention.
- Project B: [Trusted Execution in RISC-V using Secure Zones]**
  - Designed a TEE model on RISC-V with hardware-level zone isolation for secure task execution.

Execution steps:

- Initialize secure memory and keys
- Run critical code in isolated zone
- Secure context switching

**-Project C: [Air and Weather Quality Monitoring System]**

**-Project D: [Implementation of 5-Stage Pipeline MIPS Architecture]**

## CERTIFICATIONS

---

- programming in python
- internet of things from NPTEL
- data structures in C++ form NPTEL

## ACHIEVEMENTS

---

- Solved 120+ problems across all coding platforms. Profiles - [GeeksForGeeks](#), [LeetCode](#)
- Complete Arduino for Beginners -Udemy
- Full stack Development -GeeksforGeeks