RAHUL GOWDA N R

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Bengaluru, Karnataka - 560091, India

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 Electronis and communication and Engineering Bengaluru, India
  - CGPA: 8.5
- **Chinmaya pu college** *2022*
  Pre-University Education kolar, India
  - Grade: 95.52%
- **Vidya samskruthi international school** *2020*
  Secondary Education kolar, India
  - Grade:94.66%

SKILLS

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

PROJECTS

- **Project A: [FOOT STEP POWER GENERATION USING PIEZOELECTRIC SENSORS]**
  Tech Stack: [Embedded C,C++, Node.js, Express.js, MySQL] [ ]
  - A network of piezoelectric sensors embedded in floor tiles converts mechanical stress from footsteps into electrical energy through the piezoelectric effect.
  - Generated voltage from each sensor is collected, conditioned via rectifiers and voltage regulators, and stored in capacitors or batteries for later use.
  - The harvested energy powers low-consumption devices (e.g., LED lighting or wireless sensors), demonstrating a sustainable, on-site renewable energy solution for smart buildings.
- **Project B: [Image encryption and decryption through reversible logic gates based on VLSI design]**
  Tech Stack: [Embedded C,python] [ ]
  - Design and implement a VLSI architecture using reversible logic gates (e.g., Toffoli and Fredkin gates) to perform real-time encryption and decryption of visual data streams with minimal energy dissipation
  - Develop a secure data path integrating reversible gate networks for pixel-wise permutation and substitution, ensuring lossless recovery of original images while thwarting unauthorized access.
  - Validate the design through HDL simulation and FPGA prototyping, analyzing metrics like power consumption, area overhead, and encryption throughput for scalable secure imaging systems.

CERTIFICATIONS

- **programming in python**
- **internet of things from NPTL**
- **data structurs in C++ form NPTL**

ACHIEVEMENTS

- Solved 120+ problems across all coding platforms. Profiles - GeeksForGeeks, LeetCode

ACTIVITIES

- Represented college in Inter-College Cricket Tournament under VTU.
- Achieved State-level Carrom Champion title once and District-level Carrom Championship twice during school years.
- Played Kabaddi in Inter-VTU College Competition.