

# BHAVENTHAN R

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## SUMMARY

Final-year Electronics and Communication Engineering student with a strong foundation in Java, SQL, and data structures. Passionate about applying programming and analytical skills to build innovative solutions. Eager to contribute to cutting-edge projects in software development

## EDUCATION

B.E. Electronics and Communication Engineering (2022 - 2026) | **CGPA :8.37**

Sathyabama Institute of Science and Technology, Chennai

HSE (12th), State Board Examination, Tamil Nadu (2022) | **75.1%**

SSLC (10<sup>th</sup>), State Board Examination, Tamil Nadu (2020) | **99.2%**

## PROJECTS

- **Developed an Attendance management System in Java (JavaFX, JDBC, MySQL) with Excel export support.** - Developed a desktop app with MySQL backend and Excel export for record automation [githubLink](#)
- Developed a Java-based Desktop application for uploading and converting Word, Excel, and PDF files using Apache POI and PDFBox.
- **Technologies:** Java, MySQL, Apache POI, PDFBox
- **Vibration Based Predictive Maintenance for Motors (Raspberry Pi)**- Built a machine-learning-enabled monitoring system to predict motor failures using vibration analysis; aimed at reducing downtime in industrial automation.
- **Home Security System Using ESP32 Microcontroller (IoT)**- Developed an IoT-based home security system using ESP32 to detect intrusions via sensors and send real-time alerts to a mobile app.
- **Fish Pond Monitoring System using Arduino Nano**- Developed a low-cost IoT-based system to monitor water quality parameters, ensuring timely intervention for aquaculture

## PUBLICATIONS

- **Smart Belt for Coal Miners using ESP32 Microcontroller (IoT)**- Developed an IoT-based smart belt using ESP32 to monitor miners' safety parameters, with real-time alerts; published in **JCBeca** journal.

## SKILLS

### SOFT SKILLS:

Strong analytical and logical reasoning, Effective communication skills for collaboration with cross-functional teams.

### TECHNICAL SKILLS:

- **Programming Languages:** Java, SQL, JDBC, Python
- **Computer Networks:** Basic Knowledge of TCP/IP, OSI Model, HTTP/HTTPS, DNS.
- **Hardware Description Languages:** Verilog , VHDL
- **Version Control:** Git, GitHub
- **Tools & IDEs:** IntelliJ IDEA, VS Code, Tinkercad, Multisim, Xilinx, Postman
- **Database Management:** MySQL
- **AI & Productivity Tools:** MS Excel, PowerPoint, MS Word ,Canva.

**LANGUAGES KNOWN:** Tamil, English, German (Intermediate)

## CERTIFICATIONS & ACHIEVEMENTS

- Summer School Program on "Semiconductor Technology"-IISc Bangalore
- NPTEL: Python for Data Science (4 week course).
- Java programming for beginners -Simplilearn
- Solved 150+ problems based on data structures using java and python in Leetcode coding Platform