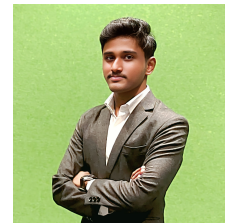# Balaji S

✉ balaji12.work@gmail.com || 🏢 Coimbatore, Tamil Nadu || 📞 9360201078

in balajiselvaraj0211 || ⌗ github.com/Balaji021 || 💻 Portfolio

HackerRank || LeetCode

Career Objective

To secure a position in a forward-thinking organization where I can apply my fundamental knowledge of Java, C, and full-stack development, while gaining practical experience and growing professionally. I am passionate about solving real-world problems, adapting to emerging technologies, and working collaboratively in team environments. With a strong commitment to continuous learning, I aim to contribute positively to the organization's goals through dedication, creativity, and a proactive mindset.

Education

Dr. N.G.P. Institute of Technology   **Tamil Nadu, India**
Bachelor of Technology - Information Technology   November 2022 - Present
CGPA: 8.59 (till 6th semester)

R.J. Matriculation Higher Secondary School   **Tamil Nadu, India**
Higher Secondary Certificate (HSC)   March 2022
Percentage: 88.3%

R.J. Matriculation Higher Secondary School   **Tamil Nadu, India**
Secondary School Leaving Certificate (SSLC)   May 2020
Percentage: 94.2%

Skills Summary

- **Programming Languages**: C, Java
- **Web Technologies**: HTML, CSS, JavaScript
- **Databases**: MongoDB, MySQL, XAMPP
- **Frameworks & Libraries**: Spring, Spring Boot
- **Methodologies**: SDLC
- **Development Tools**: VS Code, Eclipse, Android Studio, IntelliJ IDEA
- **Platforms**: Web, Windows, Android
- **Computer Skills**: MS Office, PowerPoint
- **Technical Skills**: Problem-solving
- **Soft Skills**: Leadership, Event Management, Time Management, Teamwork, Adaptability

Projects

- **File Encryption and Decryption using ECC**: Created a secure multi-layered authentication system using Quantum Key Distribution (QKD), facial recognition, and passwords for medical data. The integration of ECC and QKD enables quantum key exchange and encryption. At **35–40%** CPU usage, a 10 MB file was encrypted in **3.2 seconds**, ensuring high efficiency. The technology meets healthcare regulations, enhances data privacy, and protects against quantum threats.   **Jan 2025 - Apr 2025**
  Tech: Dart
  Tools: Android Studio, Git
  Framework: Flutter

- **Brain Tumor Classification (Machine Learning)**: This project focused on studying brain tumors using X-ray images. It uses ensemble techniques along with data augmentation. This approach raised the accuracy to **93%** and strengthened the results..   **May 2024 - Aug 2024**
  Tech: Python
  Tools: Jupyter Notebook

- **Cowrie Shell Dataset Creation for Classification Tasks Using Machine Learning**: Created and published a dataset on Kaggle with labeled images of **Cowrie Shells** for classification tasks. This dataset offers useful resources for researchers and practitioners working on machine learning models in the field of object recognition and classification tasks. **May 2024 - Jun 2024**
  Tech: Python
  Tools: Jupyter Notebook

- **Smart Parking System using IoT**: Developed a Smart Parking System to locate available parking spots. This was done using sensors and an Arduino UNO. **Aug 2023 - Feb 2024**
  Tech: Embedded C
  Tools: Arduino UNO

INTERNSHIPS

- **Summer Intern at National Institute of Technology, Tiruchirapalli**: Worked on machine learning problems and applied different ML algorithms to real-world datasets. Gained practical experience in model development and evaluation. I also developed the **Cowrie Shell Dataset** for multi-model classification, which I published on Kaggle. View Dataset .

- **Internship at KrishTec, Coimbatore**: Completed a 7-day internship focused on the basics of IoT. Gained hands-on experience in creating responsive IoT applications and integrating key features.

Area of Interest

Software Programming, Business Intelligence, Full stack development, Database Management Systems

Technical & Industrial Exposure

- Workshop on **Artificial Intelligence** at **Bannari Amman Institute of Technology** in 2024
- Workshop on **Quantum Computing** at **IIT Madras** in 2022

Certifications

- Java Programming
- Problem Solving through Programming in C
- Introduction to Industry 4.0 and Industrial Internet of Things
- Completed the DSA-Trainers course by Finest Coder, gaining hands-on experience in data structures and algorithms.

Honors and Awards

- **Academic Rank :** Rank 5 in B.Tech program
- Winner in Paper Presentation
- Winner in Competitive Coding
- Worked on over 100 problems that focused on data structures and algorithms on LeetCode.
- Second Runner-Up at Anna University Sports Board (Karate) – December 2023

Extra-Curricular Activities

- **Karate**: Secured **First Place** in a **National-Level Karate Championship** and participated in multiple international championships.
- **Karate Journey**: Earned **Second-Degree Black Belt**, showcasing dedication and discipline in martial arts.
- **Skating**: Secured **Two Championship Titles** in an **Intra-Academy Skating Competition**.

Personal Details

Date of Birth: 2nd November 2004

Linguistic Skills: English, Tamil, Hindi (Read & Write only)

Personal Qualities: Creative Thinker, Quick Learner, Patience