# Balaji S

Freshei

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HackerRank || LeetCode



To secure a position in a forward-thinking organization where I can apply my foundational 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

Bachelor of Technology - Information Technology

CGPA: 8.57 (till 6th semester)

R.J. Matriculation Higher Secondary School Tamil Nadu, India

Higher Secondary Certificate (HSC)

Percentage: 88.3%

R.J. Matriculation Higher Secondary School

Secondary School Leaving Certificate (SSLC)

Percentage: 94.2%

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SKILLS SUMMARY

• Programming Languages: C, JAVA, Python(Basic level), HTML, CSS

• Databases: MongoDB, MySQL, XAMPP

• Frameworks & Libraries: Flutter, React

• Development Tools: Git, VS Code, Eclipse, Android Studio

• 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



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Tamil Nadu, India

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March 2022

May 2020

November 2022 - Present

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

## Honors and Awards

- 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: Achieved First Place in a National-Level Karate Championship.
- 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