

# BALAJI THOTA

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## PROFESSIONAL SUMMARY

Full Stack Developer with a strong foundation in software development, debugging, and cloud computing. Experienced in building scalable web applications, optimizing system performance, and developing secure RESTful APIs. Experienced in front-end and back-end technologies, with expertise in Python, JavaScript, SQL, Flask, Django, React.js, and Cloud Platforms. Passionate about building enterprise solutions, contributing to Agile teams, and integrating CI/CD pipelines for automated deployments.

## TECHNICAL SKILLS

**Frontend:** HTML, CSS, JavaScript, React.js, Bootstrap

**Backend:** Python, Flask, Django, Node.js

**Database:** MySQL, MongoDB, PostgreSQL, NoSQL, SQLite

**Cloud & DevOps:** Docker, CI/CD, DSA, AWS (Basic)

**Tools:** Git, VS Code, RESTful APIs, WebSockets

**Soft Skills:** Teamwork, Communication, Time Management, Presentation

## WORK EXPERIENCE

**Omnytrix Integrated Labs - Hyderabad, Telangana, India**

**May 2022 – Nov 2022**

**Web App Developer Intern**

- Engineered and deployed real-time web applications for IoT and automation projects, integrating sensor data processing, improving system efficiency by 15%.
- Developed and optimized backend services and APIs, reducing latency and enhancing system security.
- Collaborated in Agile sprints, contributing to design reviews, code optimizations, and feature releases.
- Generated and applied data pipelines for real-time analytics and reporting.
- Tech Stack: Python, JavaScript, Flask, Django, REST APIs, Git, Agile, SQL, IoT, WebSockets.

**Datadot Software Solution (Remote) - Hyderabad, India**

**May 2020 – Apr 2022**

**Full Stack Developer**

- Designed and implemented scalable web applications using Python, JavaScript, and MySQL.
- Developed RESTful APIs and backend logic to process high-volume transactions efficiently.
- Improved database query performance by 20%, optimizing large-scale data retrieval.
- Worked with cross-functional teams to troubleshoot distributed systems, ensuring high availability and reliability.
- Tech Stack: Python, Java, Flask, Django, MySQL, PostgreSQL, GraphQL, Docker, Kubernetes.

## PROJECT EXPERIENCE

**Thota Motors – Web Application** | *HTML, CSS, JS* | [Website](#) | [GitHub](#)

**Present 2025**

- Designed a responsive website for a family business using front-end technologies. Planned back-end integration with a database for employee-based login and role management.

**Extending Forward-Forward Algorithm** | *ML, Optimization* | [GitHub](#)

**Nov 2024**

- Enhanced operational efficiency of the Forward-Forward algorithm by extending its application to complex datasets and diverse activation functions, exploring alternative learning methods to backpropagation using advanced statistical techniques.

**Orgdb Database Management System** | *MySQL, Python* | [GitHub](#)

**Feb 2024**

- Developed Orgdb Database Management System for efficient data management and role-based access control. Implemented login management, admin privileges, and a user-friendly interface for secure operations.

- Image Captioning** | *Python, PyTorch* | [OneDrive](#)

**Apr 2024**
- Built an image captioning system using LSTM attention mechanism generating human-like descriptive captions for images using the Flickr-8k dataset. Integrated glove context into mechanisms for more accurate, context-aware captions, enhancing accessibility and retrieval.
- Android Malware Detection** | *Python, TensorFlow* | [GitHub](#)

**Nov 2023**
- Created an Android malware detection system using machine learning with static and dynamic analysis to enhance mobile security. Enhanced security by identifying malware, mitigating risks of financial loss, identity theft, and privacy breaches.
- Detection Of Drowsiness** | *Python, OpenCV, Haar cascades* | [GitHub](#)

**Apr 2023**
- Constructed a real-time drowsiness detection system using OpenCV Haar cascades for face and eye detection, applied Eye Aspect Ratio (EAR) calculation to accurately detect signs of drowsiness.

**EDUCATION**

- Master of Science in Computer Science**

State University of New York, Utica, NY
- Jan 2023 – Dec 2024**

GPA: 3.44/4.00
- Bachelor of Technology in Computer Science**

TKR College of Engineering and Technology, Hyderabad, India
- 2018 – 2022**

CGPA: 7.55/10.00

**CERTIFICATIONS**

- Python for Everybody Specialization | University of Michigan, Coursera
- Web Design for Everybody | University of Michigan, Coursera
- Full Stack Web Development Bootcamp | Udemy