

# BOLLA SAI NAGA YASWANTH

Bangalore, India

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## Education

### R.V.C.E, Bengaluru

B.E. in Information Science and Engineering - CGPA: 9.35

Expected July 2026

Bangalore

### IIT Madras

B.S. in Data Science and Applications - CGPA: 8.97

Expected 2026

Concurrent

### Global Indian International School

CBSE - Class XII - 96.4% (School Topper)

2022

Bangalore

## Experience

### Deutsche Bank

TDI Intern

May 2025 – Jun 2025

Bengaluru

- Built comprehensive developer console using Quarkus backend, saving 2-3 hours of manual work per week for development teams
- Developed real-time deployment monitoring system showing active deployments across developer environments
- Created intelligent BDD testing workflow that auto-disables deployments during testing and re-enables upon completion
- Engineered Serenity report comparison tool with automated difference detection and highlighting for QA teams
- Implemented one-click UAT release deployment directly from console, reducing manual deployment steps by 80%
- Designed auto-deployment system detecting code changes during BDD testing with instant re-deployment capabilities

### EY Catalyst

AI Developer Intern

May 2025 – Aug 2025

Bengaluru

- Developed AI-assisted Business Continuity Management (BCM) Plan module for enterprise clients
- Built AI content generation system that automated BCM planning stages, reducing manual effort by 60%
- Integrated multiple AI models to generate contextual business continuity content based on client data and regulatory constraints
- Collaborated with cross-functional teams to deliver scalable enterprise solutions for Fortune 500 clients

### Samsung Prism

Samsung Prism Research Intern

Sep 2024 – Present

Bengaluru

- Optimized Large Language Models for mobile deployment on Samsung Galaxy S24 Ultra
- Achieved 17 tokens/second inference speed with 3B parameter models on mobile hardware through quantization and optimization
- Implemented model compression techniques reducing memory footprint by 40% while maintaining accuracy
- Researched and deployed edge AI solutions for real-time mobile applications with 1M+ potential users

### Maiti Labs

Software Development Intern

Aug 2023 – Oct 2023

Remote

- Implemented automated translation feature for NGO blog content using Google Translate API, enabling multi-language accessibility
- Enhanced accessibility for international audiences, improving engagement with climate action content

## Projects and Research

### Student Placement Management System | skillsetgo.tech

2024 – Present

- Comprehensive placement management platform streamlining end-to-end recruitment processes
- Built scalable web application handling recruiter onboarding, student profiles, and offer management
- Implemented automated matching algorithms connecting students with relevant opportunities
- Designed for adoption across university campuses, currently piloting at RVCE
- Tech Stack: GoLang Backend, Flask+HTML Templates, PostgreSQL, deployed on Digital Ocean Cloud

### CipherQuest Spy Learning Platform | Live Demo

2024

- Gamified cryptography learning platform with spy-themed interactive challenges
- Developed engaging educational game teaching cryptographic concepts through interactive spy missions
- Implemented progressive difficulty levels with real-time feedback and performance tracking
- Deployed using modern web technologies with responsive design for cross-platform accessibility

## AI-Driven Screen Time Management Dashboard | Academic Project

Aug 2024 – Nov 2024

- Designed and implemented parental dashboard enabling real-time monitoring and categorization of children's screen usage
- Applied ML models (XGBoost, SVM, KNN, Random Forest) to classify activities as educational or non-educational with high accuracy
- Integrated automated YouTube content filtering using NLP to restrict non-educational videos
- Incorporated gamification features (rewards, challenges) to promote self-regulation, reducing excessive screen time in pilot tests

## Design and Control of DBD Plasma Actuators

Jan 2024 – May 2024

- Interdisciplinary project between Aerospace Engineering, Electronics, and ISE focused on active aerodynamic flow control using plasma actuators
- Engineered and simulated Dielectric Barrier Discharge (DBD) plasma actuators in ANSYS and COMSOL to delay stall and enhance lift on a NACA 0015 airfoil
- Developed high-voltage AC power electronics system (inverter, transformer) with integrated thermal management for safe continuous operation
- Built and trained ML models (Neural Networks, Gradient Boosting) to predict aerodynamic pressure coefficients in real time
- Fabricated and tested 3D-printed prototype with smoke visualization to validate flow reattachment and stall mitigation

## Inventory & Pricing Optimization for Millet-Based Food Shop | Capstone Project

Jun 2024 – Aug 2024

- Analyzed sales, inventory, and cost data to identify top-performing products and optimize stock levels
- Applied clustering, association rule mining, and hypothesis testing to uncover customer preferences and seasonal trends
- Developed dynamic pricing strategies using market trend analysis and price elasticity estimation to maximize profitability
- Created visual dashboards to communicate insights, leading to data-backed decisions for product focus and discount strategies

## Spam Scanner | GitHub

May 2024

- AI-enhanced browser extension for real-time threat detection and user protection
- Built Random Forest Classifier achieving 94% accuracy in URL threat classification
- Integrated Groq LLM API for content analysis with real-time scoring system
- Deployed browser extension protecting users from phishing and malicious websites

## IoT Inventory Management System

2023

- RFID-based automated inventory tracking system with security features (First Prize - Project Demo)
- Implemented RFID tagging system for real-time inventory monitoring and automated stock alerts
- Built computer vision intruder detection with Twilio SMS and email notifications
- Deployed scalable IoT architecture handling multiple concurrent sensor inputs

## Technical Skills

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**Programming Languages:** Python, Java, C++, C, SQL, HTML/CSS, YAML

**Backend Technologies:** Quarkus, Flask, REST APIs, GitHub API Integration, Microservices Architecture

**AI/ML & Data Science:** TensorFlow, PyTorch, Scikit-learn, Model Optimization, Quantization, LLM Integration, Groq API, Random Forest, Data Mining

**DevOps & Cloud Infrastructure:** Docker, Git, GitHub Actions, CI/CD Pipelines, YAML Scripting, Linux, GCP, Vercel, Automated Testing, Workflow Automation

**Specialized Technologies:** IoT Integration, RFID Systems, Computer Vision, Mobile AI Optimization, Real-Time Processing, Cryptography, Network Security, OCR, Text-to-Speech

## Publications

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A. S. Grandhi, S. Umair, B. S. N. Yaswanth, A. Ravi, P. T., and S. BM, "Real-Time Text Extraction and Video Interpreter System," *IEEE CSITSS 2024*, Bengaluru, India

**Impact:** Developed assistive technology for visually impaired users using OCR and real-time audio descriptions

## Certifications

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**Certified in Cybersecurity (ISC)<sup>2</sup>** - Jan 2024

**Diploma in Data Science** - Dec 2024

**Diploma in Programming** - May 2025

## Achievements & Recognition

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**First Runner-up - BMSCE PhaseShift CTF** - Cybersecurity Competition (2024)

**Global Citizen Scholarship Recipient** - Competitive full scholarship for academic excellence (2020)

**First Prize - IoT Project Demo** - Innovation in inventory management systems

**International Virtual Team Project – InduTwin English Language Team Task “Cryptocurrency”** –

Worked in mixed international teams with students from multiple partner universities to deliver collaborative text and video submissions; achieved 91% score (B2 CEFR level, 20 hours workload)

## Leadership & Service

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### Technical Volunteer, IEEE CSITSS 2024

*International Conference on Computational Systems and Information Technology for Sustainable Solutions*

*Bengaluru*

- Designed and managed end-to-end certificate generation pipeline for multiple stakeholder categories including Session Chairs, Reviewers, and Coordinators
- Automated data collection, segregation, and cleaning workflows, ensuring accuracy and efficiency in processing participant information
- Developed customizable certificate templates and automated bulk generation scripts to produce 500+ personalized certificates
- Executed automated mailing process, ensuring timely delivery to all recipients

### Student Placement Coordinator, ISE Dept, RVCE

*Managing placement database and recruitment coordination*

*Bangalore*

- Managed placement database for 200+ students, coordinating with 50+ companies
- Facilitated recruitment process improving placement success rate by 25%

### Teaching Assistant, IIT Madras Online

*C Programming Lab mentorship*

*Chennai*

- Mentored 100+ students in C programming fundamentals and lab sessions
- Guided students to achieve their learning objectives and clarified course material

## Relevant Coursework

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Data Structures & Algorithms, System Design & Architecture, Database Management Systems

Computer Networks, Operating Systems, Machine Learning & AI