GOKUL NITTIN A

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PROFESSIONAL SUMMARY

Motivated Electronics and Communication Engineering student with a specialization in Biomedical applications. Passionate about solving real-world challenges through innovative hardware solutions. Possess a strong foundation in electronics, embedded systems, and programming, with a proven ability to contribute effectively in team environments. Eager to apply problem-solving skills to develop hardware projects that drive meaningful impact.

EDUCATION

- **Vellore Institute of Technology, Vellore**   CGPA: 8.8/10
  B.Tech, Electronics & Communication (Biomedical)   *2022 – 2026*
- **Sri Chaitanya Techno School, Bengaluru**   Percentage: 88.2%
  CBSE, Higher Secondary Certificate   *2021 – 2022*
- **Sri Chaitanya Techno School, Bengaluru**   Percentage: 94.2%
  CBSE, Class X   *2019 – 2020*

WORK EXPERIENCE

- **Summer Intern**   May 2025 – June 2025
  SKS Hospital & Postgraduate Medical   *Salem, India*
  – Gained practical insights into hospital operations, patient care, and equipment management by collaborating with the Biomedical Engineering team.
  – Learned the end-to-end process of procurement, installation, calibration, and maintenance of critical medical devices.

- **Electronics Intern, Embedded AI & IoT**   Dec 2024 – Apr 2025
  Novalinks Technologies   *Vellore, India*
  – Researched and developed communication and sensor modules for a point-of-care UTI diagnostic prototype.
  – Designed and implemented lightweight TinyML models for AI-driven diagnostics on embedded systems.

- **Summer Intern**   May 2024 – July 2024
  ShanMukha Innovations   *Bengaluru, India*
  – Conducted quality control inspections on medical devices to ensure regulatory compliance.
  – Designed, tested, and troubleshooted electronic components for medical device applications.

- **Biomedical Intern**   Dec 2023 – Jan 2024
  Salem Gopi Hospital   *Salem, India*
  – Performed daily inspections, periodic maintenance, and calibration of medical devices to ensure optimal operation.

PROJECTS

- **TinyML Model for UTI Detection**   Apr 2025 – June 2025
  ESP32, TensorFlow Lite
  – Developed and deployed a TinyML model on an ESP32 for early detection of Urinary Tract Infections.

- **IoT Environmental Monitor**   Sept 2024 – Dec 2024
  ESP32, PM2.5/10 Sensors, MQTT
  – Built an IoT device to monitor particulate matter (PM2.5/10), humidity, temperature, and gases.

- **IoT-Based Automated Irrigation System**   May 2023 – May 2024
  ESP32, RF Modules, Flutter
  – Led development of a farming automation platform with sensor nodes and weather forecast algorithms.

PUBLICATIONS & ACHIEVEMENTS

- **IEEE Publications:** "Harnessing IoT and CNNs for Emotion Recognition" - ICAET 2025, CCEW Pune
- **IEEE Publications:** "IoT and Cloud based Automated Irrigation System" - AIIoT-2024, VIT Vellore
- **IEEE Publications (Best Paper Award):** "Cloud-Controlled Smart Street Lighting System" - NEleX-2023, VIT Vellore

TECHNICAL SKILLS

- **Programming Languages:** Python, Java, MATLAB, Embedded C
- **Hardware & Embedded:** Microcontrollers, Raspberry Pi, Sensors, IoT Cloud (MQTT), Prototyping
- **Design & Development Tools:** Figma, Canva, EasyEDA, OrCAD, Multisim, LabVIEW
- **Core Competencies:** Embedded Systems Design, Machine Learning, TinyML, Root Cause Analysis

CERTIFICATIONS

- **NPTEL:** Python for Data Science, Cloud Computing
- **Coursera:** Supervised Machine Learning: Regression and Classification
- **VIT:** AI and IoT for Digital Healthcare, Design and Fabrication of PCB - EasyEDA, OrCAD, NI LabVIEW