

Devang Kotkar

📍 Sindhudurg, Maharashtra, India ✉ devangkotkar27@gmail.com ☎ 8104530717 📁 Portfolio
in devang-kotkar-6740b028a 🔑 Hybrid1530

About

I am Devang Kotkar, an **Embedded Firmware Developer** and **aspiring Data Scientist**. I specialize in embedded systems programming and have a growing passion for AI and data-driven solutions. With hands-on experience at Siemens and multiple personal learning projects, I bring a unique blend of hardware-level understanding and modern machine learning expertise.

Education

Shivaji University *BTech in Electronics and Telecommunication Engineering* *July 2020 – July 2024*
• CGPA: 8.7/10.0

Certifications

- **Data Science with Generative AI** (Ongoing) - *PW Skills 2025*
- **Data Visualisation with Power BI** - *Great learning 2025*
- **Embedded Driver Development for STM32** - *Udemy 2025*
- **The Complete Python Pro Bootcamp** - *Udemy 2024*

Technologies

Languages: C, Embedded C, Python, SQL, HTML, CSS, Javascript

Technologies: Pandas, Numpy, Matplotlib, Seaborn, Plotly, Tensorflow, Machine Learning, Deep Learning, NLP, Prompt Engineering, Keras, EDA, Regression, Git, GitHub, Google Collabs, Notebook, Power BI, scikit-learn

Experience

Firmware Developer *Siemens* *Verna, Goa Aug 2024 – Aug 2025*

- Optimized and integrated existing algorithms, reducing product test time by **10%**.
- Developed a Device Version **Identification module** to enable/disable settings based on unique device IDs.
- Designed a **Counter module** to track operations and store data in device memory.
- Implemented a **Watchdog module** to ensure device stability and log critical events.
- Created an **SPI module** to facilitate seamless data transmission between device boards, including GPIO extension.
- Conducted **unit testing** for all updates to ensure smooth code integration.
- Performed **impact analysis** to verify stability and prevent issues prior to release.
- Tools Used: C, STM32 MCU/IDE, Omicron Test Universe, MK22F128 MCU, MCUXpresso IDE

Projects

IOT Based Hydroponics Monitoring System

- Developed a system that monitors soil less plant growth where multiple users can simultaneously view and draw on a "chalkboard" with each person's edits synchronized.
- Tools Used: ESP-32 MCU, pH Sensor, water level sensor, python, Arduino IDE

Contactless Distant Human Body Temperature Scanner

- Developed a device to monitor human body temperature and alert the operator if a potential COVID-19 infection is detected.
- Tools Used: Arduino MCU, Ultrasonic Sensor, MLX90614 Sensor, Python

Sensor Fault Detection

- Implemented a machine learning system to detect anomalies in sensor data and built a interactive dashboard for real-time fault monitoring and analysis.
- Tools Used: Python, scikit-learn, Streamlit