

Objective

To leverage my skills in embedded systems and software development in a dynamic organization that fosters innovation and continuous learning, while contributing meaningfully to impactful technology solutions and the organization’s success.

Education

2022	Ellenki college of engineering & technology	B. Tech	EEE	61.80%
2019	Government polytechnic sangareddy	Diploma	EEE	82.23%
2016	Sri sai krishna high school	High school		82.65%

Technical Skills

Languages: C, C++, Embedded C, Python, C#
Bus level protocols: UART, I2C, SPI, CAN
OS: Windows, Linux/UNIX
Project Management: GitHub, JIRA, BitBucket

Professional Experience

Embedded Software Engineer
Regami Solutions

Nov 2024 – Jun 2025

- Designed and developed SDK interfaces and backend logic in C++ to enable advanced camera control through desktop applications.
- Created dynamic link libraries (DLLs) in C++ for cross-language compatibility, enabling seamless integration with C# client applications.
- Implemented HID (Human Interface Device) communication using Python for robust data transmission and device control.
- Developed a C# application to stream camera feeds over Wi-Fi using RTSP (Real-Time Streaming Protocol), enhancing remote access capabilities.
- Gained hands-on experience with ONVIF source code and structures to support IP-based video device interoperability.
- Strengthened foundational networking skills, including IP addressing, port configuration, and socket communication for real-time media streaming.

Projects

VadzoARC: Camera Control SDK Integration

- Designed and developed SDK interfaces and backend logic in C++ to enable advanced control and configuration of camera devices via desktop applications.
- Built dynamic link libraries (DLLs) to ensure cross-language compatibility, facilitating seamless integration with C#-based client applications.
- Ensured high performance and real-time responsiveness of the camera control system, enhancing usability across multiple platforms.
- Collaborated closely with front-end developers to streamline communication between native C++ libraries and .NET components.

VadzoNXT: Desktop Application Development

- Designed and developed robust desktop applications for surveillance IPcamera streaming using .NET Framework, C# and Window Forms.
- Using native C++ DLLs for retrieving and listing IP Addresses and Device Information from network through WI-FI or ethernet to integrate it in C# client application.
- GigE Vision (Gigabit Ethernet Vision) used for surveillance systems.

ALPR (Automatic License Plate Detection):

- Designed and implemented ALPR systems for vehicle License plate detection and applied OCR for License plate text recognition.
- Used Ultralytics YOLO for plate detection and OCR for text recognition.
- Deep learning for Roboflow Dataset training. Trained dataset using YOLO models in Jupyter Notebook
- Convolutional Neural Network (CNN) used in image recognition, object detection, OCR (Optical Character Recognition), ALPR (Automatic License Plate Recognition)
- CUDA & cuDNN – Essential libraries for GPU acceleration.
- GPUs (NVIDIA Tesla) – Required for fast deep learning training.

Certification and Training

- Completed 6 months of advance course in embedded systems from **Vector India Pvt Ltd**

Strengths

Hard Working Ability
Self-motivated
Punctuality

Other Information

Date of Birth : 03rd April 2000
Languages Known : English, Telugu and Hindi

Disclaimer

I certify that the above statements made by me are true, complete and correct