

Sudarshan Maghade

Pune, India | sudarshanmaghade123@gmail.com | +91 7219424101

BOD- 16 /03/ 2001 Gender – Male [LINKEDIN](#)

BE (Bachelor of Engineering) (78.52 %)

Pune, India 2020 - 2023

Dr. D.Y. Patil Institute of Engineering, Management and Research Akurdi, Pune.

DIPLOMA (83.28 %)

Hingoli, India 2017 - 2020

Government Polytechnic, Hingoli.

COURSE

Emertxe Certified Embedded Professional

Bengaluru / Nov 2023- July 2024

- Engaged in an embedded systems internship, utilizing my expertise in C, C++, and data structures.
- Collaborated with a team on various projects, focusing on optimizing code efficiency and enhancing system performance.
- Gained extensive knowledge in microcontroller programming and practical experience through hands-on projects.

TECHNICAL SKILLS

- Advance C, C++, Data- Structure, Embedded C, Shell Scripting, Microcontroller.**
Communication Protocols: UART, I2C, SPI, CAN
Peripheral Interfaces: Timers, ADC/DAC, PWM, LED, SSD, EEPROM, Interrupt etc.
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PROJECTS

1. Car Black Box with using (Pic184580 Microcontroller)

Pune / Jun 2022 – April 2023

- Developed a car black box system to log and analyze vehicle parameters such as speed, acceleration, and other vital data.
- Enhanced vehicle safety by providing detailed logs for post-accident analysis.
- Enabled continuous monitoring for early detection of issues and preventative maintenance.
- Provided crucial legal evidence in case of accidents or disputes.

2. Inverted Search (Data-structure)

Pune / Jun 2022 – April 2023

- Built an efficient inverted index for quick text search.
- Constructed an efficient inverted index to accelerate search queries.
- Enhanced search engine performance by reducing the need to scan every document.
- Designed memory-efficient data structures to handle large text corpora.
- Implemented custom algorithms for rapid and accurate indexing.

3. Arbitrary Precision Calculator (APC) (Data-structure)

- Description: Perform arithmetic operations like addition, subtraction, multiplication, and division on two large numbers.
- Purpose: To perform arithmetic operation between two large operands.
- Technologies: Embedded C, data and algorithms.

4. Digital Steganography Using LSB (Least Significant Bit)

- Developed a powerful image steganography project that utilizes advanced techniques for hiding information within digital images.
- Implemented a covert means of communication and protection for sensitive data through the modification of the least significant bit (LSB) of each pixel's color value.
- Ensured accuracy in encoding and decoding processes by designing and implementing specific algorithms for accurate embedding and extraction of hidden information.

5. Mp3 Tag Reader

- Developed MP3 tag reader software to read and display ID3 tag information from MP3 files.
- Utilized MP3 audio file format and ID3 metadata container to store file information such as title, artist, album, and track number.
- Implemented a user-friendly interface for the software, enhancing usability and facilitating efficient file organization and management for users.

6. Address Book

- Designed and developed a comprehensive address book program in C, enabling efficient storage and management of contact information.
 - Developed a user-friendly interface for adding, deleting, searching, and displaying contacts, ensuring ease of use and accessibility.
 - Enabled editing of contact details dynamically based on user input.
 - Implemented deletion of contacts by name, phone number, and email address.
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ACADMIC PROJECT

Cooling of Photovoltaic Cell Using Phase Change Material

- Effective cooling improves electrical and overall efficiency of the PV cell.
 - This research investigates the cooling of photovoltaic cells using phase change materials (PCM) to improve electrical and overall efficiency.
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EXTRA-CURRICULAR ACTIVITIES

- Participated in the Election Awareness Program in rural areas of Hingoli city in 2019.
 - Served as a member of the management team for Shiv Jayanti celebrations at GP Hingoli.
 - Contributed to the management team for the Blood Donation Program.at DYPIMER pune.
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CERTIFICATES

- Internet Of Things (IOT) Emertxe, 2023.
 - Python-Core Web soft Technologies Hyderabad, 2021.
 - The Complete C Programming Udemy, 2022.
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LANGUAGES

- English, Hindi, Marathi (Native)
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INTERESTS

- Playing Cricket | Reading Books | Watching Movies
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DECLARATION

All information provided in this resume is accurate to the best of my knowledge. I am committed to representing myself honestly and transparently in all professional matters.