

## KARTHIK G H

### CAREER OBJECTIVE

To secure a position in a company where I can use my skills and abilities to make a contribution to the organization challenging position in a progressive organization that will utilize my talents and provides me with an opportunity for personal and professional growth.

### WORK EXPERIENCE

- Currently undergoing hands-on technical training program – **Advanced Embedded Systems Course** at Emertxe Information Technologies (<http://www.emertxe.com>), Bangalore
- This course is Government of India certified program, aligned with **Skill India** / NSDC under Electronics Sector Skill Council of India (<http://www.essc-india.org>) - **Embedded Software Engineer QP ELE/Q150**

### TECHNICAL SKILLS

- Programming Languages:
  - Shell scripting.
  - Advanced C programming.
  - C++ programming.
  - Data structures
- Microcontroller
  - PIC18F4580
- Communication Protocols
  - UART, SPI, I2C, CAN, etc.
- Development environment and tools:
  - Dev environment: Vim.
  - Compilers: GC
- Embedded platforms:
  - Distributions - Linux (Ubuntu).

### PERSONAL ATTRIBUTES

- Quick learning of new initiatives
- Ability to meet deadlines through effective time management
- Ability to work effectively under pressure
- Maintaining healthy interpersonal relationships with team
- Team player with work ethics, committed to work hard and sincere

### EDUCATION

- B.E (ECE), SRI SIDDARTHA INSTITUTE OF TECHNOLOGY-TUMKUR, CGPA-6.45, 2018-2022
- Class – DIPLOMO -68%, 2018
- Class – X - 75% 2013

### CONTRIBUTIONS AND ACHEIVEMENTS

- Participated in Technodia - National level Project Exhibition & Competition last year 2022.

## PROJECTS AT EMERTXE

Project Number:1

<b>Title</b>	<b>Image Steganography using LSB Encoding and Decoding</b>
--------------	--

<b>Project brief</b>	<p>Steganography is the art of hiding the fact that communication is taking place, by hiding information in other information. Many carrier file formats can be used, but digital images are the most popular because of their frequency on the internet. For hiding secret information in images, there exists a large variety of steganography techniques some are more complex than others and all of them have respective strong and weak points. Different applications may require absolute invisibility of the secret information, while others require a large secret message to be hidden.</p>
----------------------	---

<b>Technologies</b>	<b>Embedded C – File operations, Pointers, Bitwise operations, Functions, Make files, Command line arguments</b>
---------------------	--

<b>Key challenges &amp; Learning's</b>	<ul style="list-style-type: none"> <li>• Understanding of pixels and header of image file by doing literature study</li> <li>• Transforming the embedded information to the destination without changing properties of original image</li> <li>• Faced challenges while doing bitwise manipulation of data to embed as well to retrieve the data from the destination image which was solved by self-understanding</li> </ul>
--	---

<b>Title</b>	<b>Inverted Search</b>
--------------	------------------------

<b>Project brief</b>	<p>An inverted index is an index data structure storing a mapping from content, such as words or numbers, to its locations in a database file, or in a document or a set of documents. The purpose of an inverted index is to allow fast full text searches, at the cost of increased processing when a document is added to the database. The inverted file may be the database file itself, rather than its index. It is the most popular data structure used in document retrieval systems, used on a large scale for example in search engines.</p>
----------------------	---

<b>Technologies used</b>	<b>Hashing and Single linked list</b>
--------------------------	---------------------------------------

<b>Key challenges &amp; Learnings</b>	<ul style="list-style-type: none"> <li>✓ The purpose of storing an index is to optimize speed and performance in finding relevant documents for a search query</li> <li>✓ we are creating a database file which contains the index of all words</li> <li>✓ Without an index, the search engine would scan every document in the corpus, which would require considerable time and computing power.</li> </ul>
---------------------------------------	---

## ACADEMIC PROJECTS

<b>Title</b>	<p><b>Lung cancer detection using image processing over CT scanned image</b></p> <p>The mortality rate of the lung cancer is the maximum among all other types of cancer. In this project image Preprocessing and image segmentation are implemented to obtain the diagnosis result. By using these steps the nodules are detected and features are extracted. The extracted features are calculated for classification. Support vector machines are used to classify the lung CT images into normal and abnormal.</p>
--------------	--

<b>Technologies</b>	SVM Technology, Digital image processing, K-Means segmentation
---------------------	--

## PERSONAL DETAILS

NAME	KARTHIK G H
GENDER	Male
DATE OF BIRTH	07 February 1998
LANGUAGES KNOWN	Kannada(Mother tongue), English, Telugu.
EMAIL	karthikjk1997ii@gmail.com
MOBILE	7026239954

I am **Karthik** here by declare that all the information given above is true to the best of my Knowledge and belief.

Date:

Place: Bangalore

Karthik G H