

# Chaitanya Tejaswi



## Summary

An Electronics & Communication (EC) graduate with a demonstrated exposure in Embedded Systems, Image Processing, and Python-based development; I am currently looking for an opportunity in similar domains. I have worked extensively with - AVR/ARM microcontrollers, implementing source codes in ASM/C; OCR & QR Codes in addition to conventional image processing; Python3 for creating GUIs & shell utilities, web applications (using Flask/Selenium), and machine learning scripts (using SciPy stack). I'm open to all software development roles.

## Education

June 2014 - Jun 2018	<b>Birla Vishvakarma Mahavidyalaya, Vallabh Vidyanagar (GTU)</b> <ul style="list-style-type: none"><li>Completed Bachelor of Engineering (B.E.) in Electronics &amp; Communication with a CGPA of 8.35.</li></ul>
June 2014	<b>OSEM High School, Morbi</b> <ul style="list-style-type: none"><li>Completed HSC from CBSE Board with an aggregate of 80.2%.</li></ul>
June 2012	<b>Delhi Public School, Gandhinagar</b> <ul style="list-style-type: none"><li>Completed SSC from CBSE Board with a CGPA of 9.8.</li></ul>

## Publications & Invited Talks

21st April, 2020	<b>Creating eBooks from Webpages using Python [SLIDES] [VIDEO]</b> A talk to get you started with web scraping in Python using minimal external dependencies. We will write a script that scrapes online court judgments and creates Android/Kindle compatible ebooks from them.
2018	<b>A Novel Approach of Tesseract-OCR Usage for Newspaper Article Images</b> A novel approach for optical character recognition of newspaper article images (captured as smartphone camera images) is presented, with evaluation based on two sets of images; both captured using the same camera, under varying lighting conditions. [Chaitanya Tejaswi, Bhargav Goradiya, Ripal Patel; <b>A Novel Approach of Tesseract-OCR Usage for Newspaper Article Images</b> , Journal of Computer Technology & Applications. 2018; 9(3): 24–29p.]

## Projects (Academic)

April, 2018	<b>Pico-Projector based Automation</b> Guide: Bhargav Goradiya, BVM VVNagar <ul style="list-style-type: none"><li>Implemented Classroom Automation (for teachers) using DLPDLCR2000EVM pico-projector module &amp; Raspberry Pi 3B as server.</li></ul>
October, 2017	<b>OCR-based Personal Assistant</b> Guide: Bhargav Goradiya, BVM VVNagar <ul style="list-style-type: none"><li>Implemented a text extractor &amp; text reader module for newspaper article images using Tesseract OCR &amp; OpenCV, implemented in Python.</li></ul>
April, 2017	<b>QR Code-based information system using QPython3 IDE on Android devices</b> Guide: Kaushal Patel, BVM VVNagar <ul style="list-style-type: none"><li>Wrote sample codes for automation using QR codes.</li></ul>
October, 2016	<b>GSM Communication with AVRµc</b> Guide: Anish Vahora, BVM VVNagar <ul style="list-style-type: none"><li>Implemented serial communication between AVRµc (ATmega32) &amp; GSM Module (SIM300).</li></ul>
April, 2016	<b>Filter Implementation using MATLAB</b> Guide: Robinson Paul, BVM VVNagar <ul style="list-style-type: none"><li>Implemented lowpass and bandpass filters in MATLAB as an application of Sampling Theorem.</li></ul>
April, 2016	<b>Keypad &amp; ADC/DAC Interfacing with 8085µp</b> Guide: Bhargav Goradiya, BVM VVNagar

- Interfaced 4x4 keypad & ADC/DAC (0800/0808) with Intel 8085 $\mu$ p using 8255 PPI.

October, 2015

#### Mod-100 Counter

Guide: Anish Vahora, BVM VVNagar

- Implemented a Mod-100 Counter using IC-7490 (Decade Counter) & IC-74248 (BCD to 7-segment Decoder) that loops through 00-99.

## Projects (Personal)

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## Skills

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Languages (Programming)	Python, C/C++, ASM (AVR, x86), PowerShell, HTML/CSS, JS.
Languages (Spoken)	English, Hindi, Gujarati.
Software Stack	Python (SciPy stack, OpenCV, Flask, Selenium).

## References

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Dr. Bhargav Goradiya	Head of Dept., Electronics & Communication Dept. (BVM Engineering College, VVNagar)
Prof. Anish Vahora	Asst. Professor, Electronics & Communication Dept. (BVM Engineering College, VVNagar)