



Deepak Garasangi
Bachelor of Technology in Mechatronics Engineering
Manipal Institute of Technology Manipal, India
Deepak.garasangi@gmail.com

Male
DOB: 22/05/1998
+91 9167 304 808
[deepsite](https://deepsite.com)

Examination	Specialization	University / Board	Year	CGPA/ Marks
Graduation	Mechatronics	MIT Manipal	2020*	7.4/10
Intermediate	-	CBSE	2016	89.4/100
Matriculation	-	ICSE	2014	91.16/100

Areas of Interest

- Deep Learning, Natural Language Processing, Computational Linguistics, Python Scripting

Technical Proficiency

Operating Systems : Linux, Windows
Programming Languages : Python, C++, Java
Frameworks and Tools : Pytorch, Tensorflow, Keras, Spacy, Git
Softwares/Tools : MATLAB, L^AT_EX

Work Experience

- **Summer NLP Intern, Dept. of Sanskrit Studies, University of Hyderabad** [May '19 - Present]
(Guide : Prof. Amba Kulkarni, UoH) *Hyderabad, India*
 - **Reimplementation of ACL conference paper on Poetry to Prose conversion in Sanskrit.**
Scraped data from Wikipedia, Mahabharata to form a corpus. Cleaned data to use BPE and learn vocabulary for the task. Trained the BPE vocabulary on VedaBase, Wikipedia using Word2Vec, FastText and character embeddings and form meta embeddings. Embeddings passed to a seq2seq model with attention to obtain correct prose order.
- **Summer Software Intern, JNPT Port** [May '18 - June '18]
(Guide : Mr R D Rao, Manager CTCC) *Mumbai, India*
 - **Data extraction from XML files of Port vessel container operations.**
Wrote a python script using BeautifulSoup to parse through the XML tree and obtain the values. This script was used on 100 XML files to obtain output in neat legible text files, improving the productivity of senior employees.
 - **Automated script for sending invoices along with attachments in bulk.**
Wrote a Python script to extract information from two excel files containing the recipient address and file name, then use this information to send an email. Script used pyexcel, smtplib, selenium libraries. The script was used on 700 files and was comparatively faster than the Oracle based sql system being used previously.

Personal Projects

- **Started a NLP based Blog: [DeepinNLP](https://deepinNLP.com)** [Aug '19 - Present]
 - Publish technical articles, implementations of research papers, related to NLP bi-monthly. Have a userbase of 2000 people visiting weekly from 50 countries. Used the Hugo web framework coupled with Google Firebase to deploy it.
- **Alexa Trends Finder** [Sep '18 - Nov '18]
 - Gather insights from the Alexa analytics website to see what is trending.
 - Implemented a python crawler that scrapes data and then outputs the most linked pages in a systematic order. Used BeautifulSoup and urllib libraries.
- **Vocabulary tracker script** [Aug '17 - Sep '17]
 - A script which keeps a tab on how many words we have learnt from Memrise website and plots a visual growth chart.

- Employs the selenium module to access the website, logs onto it and scrapes the number of words learnt on that given day, then by using the openpyxl module, it logs the data into excel, from which a visual growth chart is created.

Academic Projects

- **Robotics Lab Project - Face detection using Raspberry Pi 3** [March '19 - April '19]
(Guide : Prof. Vibha Damodara, MIT Manipal)
 - **Abstract** Build an economical portable face detection mechanism using machine learning and image processing algorithms.
 - Implemented a face detection algorithm using haar-cascades and LBPHFacerecognizer module, loaded on top of Raspberry Pi 3 to solve the problem statement.
 - Results - The algorithm was trained to recognize 4 faces, with an accuracy of 70% and a tweak on reduction in input stream resolution size to increase speed by 2x, to improve performance despite dataset limitations.
- **Thermodynamics Project - Plot the Coefficient of performance vs evaporator temperature using Python code** [Aug '17 - Sep '17]
(Guide : Prof. Shashank Pansari, MIT Manipal)
 - **Abstract:** The effect of evaporator temperature on the coefficient of performance of a heat pump is to be visualized.
 - A python script is used to achieve the visual plots by using matplotlib and extracting data from the available dataset from an excel file. The output is displayed with the help of an interactive GUI interface using WX module and tkinter.
 - Results - The plotted output graphs indicated that as the temperature increased the COP also increases.

Relevant Courses

- | | |
|-------------------------------------|----------------------------------|
| • Neural Networks and Deep Learning | • Improving Deep Neural Networks |
| • Sequence Models | • Convolutional Neural Networks |
| • Introduction to Data Science | • Machine Learning |
| • Artificial Intelligence | • Deep Learning Specialization |

Technical Workshops/Hackathons

- **Wearable Device Hackathon 3.0, KMC Manipal** [Sept '19]
We proposed a pitch for wearable spectacles for blind people with NLP based speech models which explain the surrounding based on the video stream using Visual Question Answering methodology.
- **Machine Learning Summer School, IIIT Hyderabad** [July '19]
Attended and participated in a 7 day workshop on the fundamental and recent happenings of machine learning, in which topics on Optimisation, GAN's, self supervised learning, cross modalities, Meta learning, Incremental learning and NLP were covered.

Volunteer Experiences

- Scio Foundation (NGO): Gave career guidance to 9th and 10th-grade kids along with our fellow volunteers, reaching out to 300 plus students. We organised 2 free medical camps in the villages of Udipi which served more than 150 people. Served as the President of the NGO for one year. [Apr '17 - Apr '19]

Hobbies and Interests

- Memory training, Reading psychology books, non-fiction, Cycling, Learning new languages.

Updated on 15th Sep 2019