

# MAMIDI RATNA ABHISHEK

Room# 414, Boys Hostel, IIIT Chittoor, Sri City, A.P - 517588  
(+91) 9492424560 ◊ abhishek.m15@iiits.in

## ABOUT ME

---

A self-motivated, hardworking undergraduate student, enthusiastic to learn new domains in the world of computing. Experience in research areas with good problem-solving skills.

## EDUCATION

---

Indian Institute of Information Technology SriCity, Chittoor	August 2015 - Present
Department of ECE and <b>Honors in Computer Science</b>	CGPA: 8.54/10
Ascent Junior College, Visakhapatnam	2013 - 2015
Senior Secondary in M.P.C	Percentage: 96.7%
Bhashyam Public School, Tanuku	2012 - 2013
S.S.C	Grade: 9.7

## EXPERIENCE

---

<b>Research Student</b> , Undergraduate Honors	August 2017 - Present
<b>Teaching Assistant</b> , IIIT Sri City	August 2016 - Present
C Programming under Dr. Venkatesh Vinayakarao	
Data Structures under Dr. Amitava Das	
Digital Electronic Circuits under Dr. Siva Prasad K	
Basic electronic circuits under Dr. Paul Braineard E	
Digital Logic Design under Dr. Siva Prasad K	
<b>Data Science Summer Intern</b> , Monsanto Company, Bangalore	May 2018 - July 2018
<b>Summer Intern</b> , Glosys, Chennai (Work from home)	May 2017 - July 2017

## PROJECTS

---

**Developed a tool to find the most influential scientists in a given field - Summer Internship project at Monsanto** May 2018 - July 2018

- Having relationships with top influencing scientists is key for the industry in improving existing and developing new technologies. Apart from publications, other factors like academic expertise, institutional affiliations, industry/government relationships etc. would determine the level of influence.
- A simple tool that considers different factors and allows users to give weight for each factor makes the mapping easier and dynamic, to find the most influential scientists. This tool uses Natural language processing, Data science and Machine learning techniques to analyze the data and predict different factors. [Python, Numpy, Pandas, Dash, Scikit-learn]

**Aspect Identification of Code-mix data - Research** January 2018 - May 2018

- The usage of code-mix language on social media is increasing day by day. It is very important to analyze and understand the underlying meaning of the data.
- This project aims to find the aspect from a given code-mix sentence. It involves data collection from Twitter, annotation, analyzing data and model building. This project involves the combination of Natural language processing, Machine learning and Deep learning techniques. [Python, NLTK, Keras]
- <https://github.com/Abhishekmamidi123/ABSA-Codemix/>

**Neural Artistic Style Transfer** February 2018 - May 2018

- A unique deep learning technique is used to generate a stylized content image when a content and style images are given as inputs. The style of an image is transferred to the content image. We implemented these visual effects using the Convolutional Neural Networks. [Python, Tensor flow]
- <https://github.com/Abhishekmamidi123/Neural-Artistic-Style-Transfer/>

### **Search Engine - Information Retrieval**

August 2017 - November 2017

- Life without a search engine like Google cannot be imagined.
- A mini search engine is implemented which gives top ten results for a given query, based on the tf-idf, phrase queries and cosine similarity techniques. A summary is also shown for each result using LexRank. The news dataset is used for this project. The data set is preprocessed and stored in an efficient way. It has nearly 4,00,000 documents. [Python, NLTK, BeautifulSoup, Django]
- <https://github.com/Abhishekmamidi123/Information-Retrieval>

### **myVillage - Django project**

August 2017 - November 2017

- A dynamic Django project targeting farmers for the better visualization of their farms, wells, houses on the map. Used forecasting methods to predict the weather, market prices. A social platform is also created where the farmers can post their problems. [Python, Django, Bootstrap, Javascript]
- <https://github.com/Abhishekmamidi123/myVillage-Django>

## **DATA SCIENCE HACKATHON PROJECTS**

---

### **Predict the damage to a building - ML Challenge by HackerEarth**

July 2018

- It is a multi-class classification problem and the data has 56 different features of a building. This problem involves preprocessing, combining different data sources, data balancing, handling missing values, removing duplicates, applying statistical methods, analyzing data, feature selection, modelling and hyperparameter tuning. I secured a rank of 242 out of 7540. [Python, Numpy, Pandas, Scikit-learn, XGBoost, Matplotlib, Seaborn]
- <https://github.com/Abhishekmamidi123/Predict-the-damage-to-a-building-ML-Challenge>

### **Mekktronix Sales Forecasting - Data science challenge by HackerEarth**

July 2018

- We can think about the problem as a regression problem or convert into a time series forecasting problem. This problem involves data preprocessing, choosing the correct model and hyperparameter tuning. I secured a rank of 223 out of 4743. [Python, Numpy, Pandas, Scikit-learn, XGBoost, Matplotlib]
- <https://github.com/Abhishekmamidi123/ZS-Data-Science-Challenge>

### **Fraud detection of a transaction - AI challenge by HackerEarth**

July 2018 - August 2018

- It is a binary-class classification problem and the data has 406709 transactions and 54 features. This problem mainly concentrates on feature selection, model building and hyperparameter tuning. I secured a rank of 36 out of 1354. [Python, Numpy, Pandas, Scikit-learn, XGBoost, Matplotlib, Seaborn]
- <https://github.com/Abhishekmamidi123/Supervised-Modeling-with-Emphasis-on-LAUC>

## **TECHNICAL SKILLS**

---

<b>Computer Languages</b>	Python, C/C++
<b>Frameworks</b>	TensorFlow, Keras, Django, Dash, Bootstrap
<b>Libraries</b>	Numpy, Scikit-learn, NLTK, Pandas, Matplotlib, Seaborn
<b>Operating Systems</b>	Ubuntu, Windows
<b>Software and Tools</b>	Git
<b>Strengths</b>	Data science, Machine learning, Deep learning, Natural Language Processing.

## PERSONAL SKILLS

---

Project Management  
Leadership and Goal setting

Team work  
Interpersonal skills

## RELEVANT COURSES

---

Data mining  
Topics in Machine learning  
Time series analysis  
Data structures  
Operating systems

Statistics for Data science  
Information Retrieval and basics of NLP  
Computer Vision  
Algorithms  
IT Workshop and IT Systems

## ACADEMIC ACHIEVEMENTS

---

Member of the **Deans list** for the first four semesters in the institute.

## ONLINE COURSES/CERTIFICATIONS

---

- [Machine learning by Stanford University on Coursera.](#)
- Deep learning specialization by deeplearning.ai on Coursera.
- [Python and Django Full Stack Web Developer Bootcamp by Jose Portilla](#)
- [AWS Essentials](#)

## SOCIAL LINKS

---

Github: <https://github.com/Abhishekmamidi123/>  
LinkedIn: <https://www.linkedin.com/in/abhishekmamidi/>  
Kaggle: <https://www.kaggle.com/abhishekmamidi/>