

# Athashree Vartak

[athashreeav5556@gmail.com](mailto:athashreeav5556@gmail.com) | Mumbai, India

LinkedIn: [www.linkedin.com/in/athashree-vartak](https://www.linkedin.com/in/athashree-vartak) | GitHub: [www.github.com/bazingaav](https://www.github.com/bazingaav)

## EDUCATION

**Thakur College of Engineering and Technology, Mumbai**

2016 - Expected 2020

Bachelor of Engineering in Computer Engineering | CGPA: 9.42/10

## TECHNICAL SKILLS

- Programming Languages : C, C++, Python, R
- Web Technologies : HTML, CSS, JavaScript, PHP
- Database : MySQL
- Frameworks & Tools : Django, IBM Watson Studio, Git/GitHub

## ACADEMIC PROJECTS

**Design and Development of System to Improve Classification Models using Ensemble Learning**

Jan 2020 - Mar 2020

- Implemented SVM, KNN, Logistic Regression, Decision Tree, Naïve Bayes and Ensemble methods like Bagging, Boosting, Voting and Stacking to understand the difference in performance of these approaches to that of the standard basic algorithms on MNSIT dataset.
- Created stacking models using basic classification algorithms, Random Forest, LightGBM, XGBoost and their variants obtained using hyper-parameter tuning and feature selection.
- Obtained the accuracy of 97.5% using 2-level stacking model for the said dataset.

**Approach to efficiently choose Machine Learning Algorithms and Performance Measures**

July 2019 - Nov 2019

- Devised method to choose algorithm and performance measure on the basis of based on various factors like training time, prediction time, data distribution, number of features, expected outcome, type of data, etc. that are important for a particular problem by implementing them on real datasets and synthetic datasets.
- Implemented SVM, KNN, Decision Tree, Naïve Bayes and Logistic Regression and verified the results by comparing results of with algorithms on the same dataset.

**Cricket Game Outcome Prediction**

Mar 2019

- Analyzed the acquired data to determine the predictions that can be made and then pre-processed the data.
- Implemented two models utilizing numpy, sklearn, matplotlib, seaborn, pandas; first one to determine outcome of cricket match on the basis of toss outcome and second one to decide role of a new player based on past data.
- Achieved an accuracy of 75% by using Naïve Bayes algorithm for first prediction.
- Increased accuracy of second model by 15%; replaced classification by classification after clustering approach.

## PROFESSIONAL EXPERIENCE

**Web Developer Intern**, Apex Consultants, Mumbai

Jan 2019 – July 2019

- Revamped existing website by redesigning, introducing new modules, fixing bugs, and adding visual elements to expedite page loading, facilitate better navigation and improve user experience. Observed an increase in traffic to website by 10%.
- Designed, developed, and deployed a new website and also used JQuery and Ajax to manipulate elements entered by user, process form validation, and display animations.

**SQL Developer Intern**, KAPRAS Technologies, Mumbai

Dec 2018 – Feb 2019

- Assisted in designing a data warehouse for a data analysis project and worked on SQL Database system.
- Understood indexing in practical business scenarios and database table and query tuning for performance optimization.

**Web Developer Intern**, TCET, Mumbai

June 2018 – July 2018

- Designed and developed a web portal and database for managing faculty's publication records utilizing HTML, CSS, JavaScript, MySQL and PHP.

## LEADERSHIP EXPERIENCE

**Editor**, COMP Department Technical Magazine (Nimbus), TCET

July 2017 – Sept 2019

- Interacted with various industry personnel to gain their perspective for bi-yearly technical magazine.
- Designed content for magazine according to theme and proofread articles by other authors.

**Secretary**, Computer Society India (CSI) – TCET Chapter

Aug 2018 – July 2019

- Planned and organized various technical competitions, seminars, and workshops, in a team of six, to help students develop strong technical prowess and also administered a 10-day industrial visit for 110 students.
- Spearheaded hospitality department, consisting of 20 people, during 3-day annual technical festival Zephyr'18.

## ACHIEVEMENTS

- Ranked among top 4 teams at national level competition Smart India Hackathon'19.
- 2nd rank in Intra-College Group Dance Competition at annual cultural festival Sojourn'18.
- Verbal Mention – Delegate of Japan, UNOICT Committee at TCET MUN'17.