

# VYBHAV JAIN

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<https://github.com/vybhavjain> | [www.linkedin.com/in/vybhav-jain](https://www.linkedin.com/in/vybhav-jain) | <https://vybhavjain.github.io/>

## EDUCATION

**Ramaiah Institute of Technology**, Bengaluru, India

2016 - 2020

*Bachelor of Engineering in Information Science and Engineering*

CGPA 9.45/10 | Best out-going student | Second rank | Best Project Award for Thesis

## SKILLS

**Programming Languages:** Python, C, Java, Julia, VBScript, SQL, Go, JavaScript, R

**Tools and Frameworks:** MongoDB, Flask, UFT, Pandas, Numpy, Matplotlib, Scikit-learn, SQLAlchemy, Git, NLTK

**Industry Knowledge:** Machine learning, Data Analysis and Visualization, Design patterns, NLP, Tool Development, Agile methodology, Object Oriented Programming, Regression Testing, JIRA, Data Scraping

## EXPERIENCE

**Software Engineer, Shell India Market Limited, Bengaluru**

Sep 2020 - Present

- Designed, built and executed automated tests using VBScript to validate data centric applications
- Maintained and modified an Automated Regression Suite based on testing needs
- Designed and developed automation tools using Python to reduce manual effort by 95%
- Drove root cause analysis and resolution approaches in cases of failures

**Trainee - Artificial Intelligence, Maistering B.V, Bengaluru**

June - July 2020

**Intern - Artificial Intelligence Engineer, Maistering B.V, Bengaluru**

Mar - June 2020

- Built API endpoints and integrated them with Flask and Swagger
- Manipulated Data from an SQL server using pyodbc and SQLAlchemy
- Integrated various cognitive services like OCR, Image Processing, Matrix Detection using CV2 and PIL into the masters collection
- Designed a document tagging and classification system using the module NLTK and an automatic report generator using the module PPTX

**Mobile Application Developer Intern, NSRCEL, Indian Institute of Management Bengaluru**

Aug - Sep 2018

- Developed a token-based internet access system application names “NSRCEL-WiFi” for IIMB
- Issued a public authentication key to eligible mobile clients during registration after OTP authentication
- Built a mobile application using Java in Android Studio, stored data using Firebase and accessed it using javascript

## PUBLICATIONS AND PRESENTATIONS

- Published “*Multi-Agent Based Systems In Machine Learning and its Practical Case Studies*” in the book “Machine Learning for Intelligent Decision Science”, Springer in 2020 [[Link](#)]
- Presented “*Emotion Analysis from Human voice using various prosodic features and text analysis*” during International Conference on Recent Innovative Trends in Computer Science and Applications (ICRITCSA 2019) and published in the “Journal of Computational and Theoretical Nanoscience” [[Link](#)]

## PROJECTS

**Fabrication of Images From Audio (F.I.F.A)**

- Created a Flask web framework containing endpoints to synthesize facial images from speech using StackGAN and ProGAN
- Trained Deep Learning model on Face2Text v1.0 dataset in 5 epochs with each epoch containing different numbers of sub epoch based on the image resolution levels
- Converted the audio to text using Google Speech to Text AP and encoded the textual description into a mathematical vector called text embeddings using a LSTM network which passed to the generator model [[Link](#)]

**Image Retrieval along with Encoded Storage and Tagging (I.R.E.S.T)**

- Created APIs using the Flask web framework to implement a keyword based program that searches relevant images from a given website and downloads it after which it auto tags these images and uploads the images to cloud service
- Created a GET request that queries stored images with a keyword and displays top 5 relevant images [[Link](#)]

**Emotion Analysis from Human Voice**

- Designed and Implemented an application that outputs an emotional analysis on a given voice sample
- Used statistical models to combine the results of Sentiment Analysis of text using IBM Watson Tone Analyzer and the prosodic analysis of speech using the parselmouth module

**Wumpus world**

- Developed *The Wumpus world* simulator in Java using the concept of frames to create an interactive GUI
- Implemented code followed design patterns like adapter pattern and strategy pattern to demonstrate the importance of knowledge representation, reasoning and planning in AI [[Link](#)]

## ACHIEVEMENTS

- Placed in the **top 100** from over 1,00,000+ participants in the **National Engineering Challenge 2019**
- **Best Programmer 2018** title during Artificial Intelligence and its Application course organised by Department of Computer Science and Engineering, Ramaiah Institute of Technology
- **National Finalist** for the hackathon **Codechef 2019** organized by Cognizant Bengaluru
- **Runners-up** at the hackathon **CodeforGood 2019** by J P Morgan Chase, Bengaluru

## EXTRA-CURRICULAR ACTIVITIES

- Co-founder and Head - Numera, the logic and reasoning club at Ramaiah Institute of Technology, Dec 2018 - May 2020
- Volunteer - Deendayal Janaseva Samithi, NGO focusing on spreading awareness about women literacy, 2018 - 2019
- Treasurer - IEEE CIS club in RIT 2018-2019 and organized workshops and managed funds
- Event organizer for ‘Code Rush 2019’ - IEEE - Women In Engineering at Ramaiah Institute of Technology
- In-charge of documentation, NEN-E-WEEK 2018 by Entrepreneurship Development Cell, Ramaiah Institute of Technology