

# Vighnesh Pai

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## EDUCATION

### MANIPAL INSTITUTE OF TECHNOLOGY

B.TECH. IN COMPUTER SCIENCE  
AND ENGINEERING  
CGPA : 8.71  
Graduated July 2020 | Manipal

### LITTLE ROCK INDIAN SCHOOL

CLASS 12  
Percentage : 95.4  
Graduated March 2016

### CLASS 10

CGPA : 10  
Graduated March 2014

## COURSEWORK

### UNDERGRADUATE

Data Structures and Algorithms  
Operating Systems  
Artificial Intelligence  
Machine Learning  
Natural Language Processing  
Computer Vision  
Social Network Analysis  
Optimization Techniques

## SKILLS

### PROGRAMMING

Languages  
C++ • C • Python • JavaScript  
Frameworks:  
Django • React • PyTorch

### EXTRA CURRICULAR

- Played badminton at the state level
- Proficient tabla artist

## EXPERIENCE

### SAMSUNG RESEARCH INSTITUTE BANGALORE | INTERN

- Designed a novel deep learning pipeline to separate environment sounds from human speech as part of the OnDevice AI team.
- Built audio classification model for environment sound classification with over 97% accuracy for the use case labels.
- Worked with PyTorch for source separation and Tensorflow for audio classification tasks.

### HEWLETT PACKARD ENTERPRISES | SUMMER INTERN ([SOURCE](#))

- Designed a web application in C++ that assists in gzip compression/decompression of files/folders and provides a tabulated report of the process.
- Deployed the server in a docker container. Web framework used - microsoft-cpprestsdk.

### INDICARE HEALTH SOLUTIONS PVT LTD | INTERN

- Worked on developing a protocol for storing decentralized medical records. Built database functionalities in Go and implemented files processing on IPFS.
- Gained exposure to the versatile and challenging work environment of a startup.

## PROJECTS

### HAND TRACKING AND OBJECT INTERACTION

- Epilepsy is a neurological disorder that can cause seizures and lack of hand eye co-ordination. Worked with a team to implement a hand tracking model and on-screen object interaction to assist in improvement of hand eye coordination for epilepsy patients.
- Built with Python and Darknet framework.

### INSTART | ([WEBSITE](#)) ([SOURCE](#))

- InstArt is the Instagram for art aficionados where you share inspired artworks with your peers.
- Built with Django framework, JavaScript and Bootstrap.

### SECONDBRAIN | ([WEBSITE](#)) ([SOURCE](#))

- SecondBrain is a clone of Google Keep. It is a convenient application to store and maintain notes and todos.
- Built with Django framework, JavaScript and Bootstrap.

## RESPONSIBILITIES

### IE-CSE MANIPAL | MANAGEMENT COMMITTEE MEMBER

- Conducted workshops and tech events to spread knowledge of Computer Science in the college. Tutored juniors in the club in domains like Algorithms , Data Structures and Competitive Programming.