

## Pre-Final Year Undergraduate



## **EDUCATION**

Present August 2018 Birla Institute of Technology and Science, Pilani, Goa | BE in Electronics and Instrumentation

CGPA: 7.48/10 (4 semesters)



### **M** Work Experience

### July 2020 May 2020

### Microsoft | Software Engineer Intern

- > Was one of the select 33 second year interns among all 500+ interns
- > Migrated a static website to a dynamic website which implemented systematic polling of APIs and real time update of components in ReactJS and deployed the web service on Azure
- > Added a system to existing .NET MVC project to integrate and run ReactJS pages on it with the use of transpilers and bundlers

JavaScript ReactJS C# AWS

### May 2020 Feb 2020

### Tessellate Imaging | Machine Learning Intern

- > Worked on adding features such as cloud deployment of deep learning models, model optimization and resolving bugs in a set of open source tools
- > Helped in creating real-world applications such as automated plant-leaf disease classification, weapon detection and animal detection using custom libraries

Python PyTorch MXNet TensorFlow

## Sept 2019

# May 2019

WorldQuant LLC

Research Consultant

- > Built robust financial signals to detect arbitrage in international financial markets
- > Selected to be a part of the research consultant programme after breaking into the top 1 percentile of participants of the WorldQuant challenge
- > Created algorithm-based models using Python and propriety libraries that seek to predict movements of global financial markets

Python

### SELECT PROJECTS

RASOEE

JUNE 2020 - AUGUST 2020

Submission for PyTorch Summer Hackathon 2020

O Code Website

- > Web and android application that identifies food dishes from images. The image classification model is trained in Pytorch using a EfficientNet B2 model as base, and some pre-processing done on the images.
- > The data of 308 unique classes of food items was scraped from the web and cleaned. The mobile application, built with Kotlin, runs completely on the edge and no active internet connection is required to identify the dishes.
- > The application also takes an image input, and returns the identified food item, its primary ingredients, link to a recipe and link to video tutorials for that dish.
- > The website is built with Django and hosted on Heroku

Python Django Kotlin PyTorch

**CHAINVOTER** JUNE 2019 - JULY 2019

Submission for Microsoft CodeFunDo++ Hackathon



- > Web and mobile application for secure online voting using blockchain.
- > Implements two-factor authentication of voters using face recognition with Microsoft Face API and MongoDB database.
- > In the blockchain the creation of block uses User ID(containing Name, Party, Constituency, Aadhaar, Voter ID, and Signature(Name, Aadhaar, Voter ID) and hashes them. Also checks if the vote is a duplicate before adding it to the ledger

Javascript Angular Typescript CSS

# **P** OTHER PROJECTS

- > OCR Sudoku Solver
- > Double DQN for Atari Pong in OpenAI Gym
- > Text Cipher Algorithms in C++

- > Object Detection in Real Time and in Images using YOLO v3
- > Forest Cover Binary Classification using an Ensemble Model
- > Russian Al Cup 2019 Bot (1st Round Qualified)

### TECHNICAL SKILLS

**Proficient** Python, C++

Shell, C#, Javascript, ŁTEX Comfortable Basic Knowledge MATLAB, Ruby, Typescript

PyTorch, TensorFlow, Keras, Angular, ReactJS Frameworks

> **Tools** Git, NumPy, Pandas, Scikit-Learn



# **P** ACHIEVEMENTS

### Scholarships:

> 2017 • Uttar Pradesh Science Talent Search Exam (UPSTSE) Scholarship by Govt. of India

### Competitions:

- > 2019 Microsoft CodeFunDo++ Hackathon: Only 2nd year team in institute top 3
- > 2019 Microsoft Hackday 2.0 : First Runners-Up in institute



## **1** MISCELLANEOUS

**TECHNICAL WRITER @ Towards Data Science** | You can find my articles here

**STUDENT GUIDE** | Mentored 8 freshmen through their first year

HOBBIES | Drums (Performing member of the institute music society), Quizzing (Active member of the institute quiz club) CS50x Puzzle Day | Solved 6 out of 8 problems in Harvard's CS50x Puzzle Day 2020 which involved critical thinking, analytical skills and mathematics