## **AISHWARYA NAIR**

2017.aishwarya.nair@ves.ac.in | https://www.aishwaryaaanair.github.io/Resume

### **EDUCATION**

# BACHELOR IN ENGINEERING INFORMATION TECHNOLOGY

July 2017 - July 2021

**VESIT** 

• CGPA: 9.14/10

### **PUBLICATIONS**

### FOREST FIRE PREDICTION USING LSTM

*May 2021* 

S. Natekar, S. Patil, A. Nair and S. Roychowdhury

2021 2nd International Conference for Emerging Technology (INCET), 2021, pp. 1-5, doi: 10.1109/INCET51464.2021.9456113

### **ACHIEVEMENTS AND AWARDS**

- Stood top 3 in the Information Technology department 3 times.
- Granted a scholarship for standing in the top 1% of the state in board exams in 2017.
- Stood third in the college in board exams in 2017
- Stood in the top 6% in the country in JEE Mains in 2017
- Science foundation scholarship awardee for the years 2010, 2011, 2012.

#### **PROJECTS**

### FOREST FIRE PREDICTION USING LSTM

January 2020 – May 2021

Student Team Leader

- Awarded a research grant by the Microsoft under the AI for Earth program.
- Created and designed the proposal to secure the grant from Microsoft.
- Achieved ~85% accuracy on LSTM model with Python, Tensorflow and Azure using data from FIIRMS obtained from NASA for India.
- Led a team of 4 for data management and data collection and 2 for web development.
- Designed a web application framework to use the model outputs to view data points on the map using Django.
- Created and managed ~1mil rows on Azure data storage for pre-processing.
- Assisted in writing, editing and presenting the research paper proposed at INCET 2021.

### **ASSIST**

*September 2019 – March 2020* 

# (ASSISTIVE SMART STICK FOR INDEPENDENT & SAFE TRAVEL)

Team Leader

- One of 49 teams selected for regional finals for e-Yantra Ideas Competition organized by IIT Bombay among a total of 1346 teams.
- 83% accuracy on an image detection with deep learning to detect objects in front of visually impaired users.
- Led a team of 2 for IOT maintenance and 1 for web development.
- Mapped the most inclusive spaces using the image processing algorithm detecting braille, ramps and textured areas, Google Maps API, HTML and PHP.
- Created a visually impaired friendly web application with speak aloud facility for location tracking.

### LONG TERM CAPACITY PLANNING (LCP)

September 2019 – March 2020

Team Leader

- Super Team awardee of Project Deep Blue organized by Mastek & Majesco.
- Achieved 86% accuracy to predict the water demand by the city of Mumbai for the year 2030 with Data Mining techniques with Python.
- Led a team of 4 to supervise data collection and web development.
- Created and presented the application to the board of directors at Mastek & Majesco.

#### PROFESSIONAL EXPERIENCE

### **Artificial Intelligence/Machine Learning Engineer**

November 2021–Present

- Identified 23 emotions expressed after eating salty snacks and created a comprehensive lexical ontology to classify the emotions for a Fortune 50 company.
- Created an algorithm to classify text based on these 23 emotions to record ~70% accuracy with fine-tuned MPNet and BERT models.
- Managed a team of 5 for data management and data creation.
- Increased accuracy of existing text classification framework by **10-30%** by creating fine-tuned transformer models to classify text based on 20 actionable parameters to give insights to Fortune 500 companies.
- Deployed an API on AWS to service ~2000 requests to classify text based on 20 topics.
- Created an algorithm to separate clauses out of sentences using morphological analysis used to augment the accuracy of the transformer models.

### AI/ML Intern

September 2021 - November 2021

### **HEYSTACK**

- Created a data collection python algorithm to obtain data from major e-commerce websites.
- Researched emotional response by humans on consumption of snacks and compiled a list of 23 emotions along with their definition to identify presence of these 23 emotions from text.
- Led a team of 5 for organization of exhaustive list of emotions evoked by snacks.

### **Web Development Intern**

September 2019

### ETHOS CVFL

- Modified the existing website to be more response for more devices and screen sizes.
- Modified the website to be 23% more SEO friendly.
- Designed 3 new web pages consisting of user interaction and feedback forms using HTML, CSS (Bootstrap) and Laravel.

### **EXTRACURRICULAR ACHIEVEMENTS**

- Obtained Nivel C2 Avanzado (fluent speaker) in Spanish in 2019
- Member of Editorial Committee: Praxis 2018
- Received Best Speaker Award: Awakening The Scientist 2018
- Runner up in handball house trophy in 2014
- Represented the school for U-12, U-14, U-16 basketball at the district and state level.
- Captain of Mumbai Strikers Sports Club Basketball division.