### BADRI NARAYANAN MURALI KRISHNAN

## **EDUCATION**

# Sri Sivasubramaniya Nadar (SSN) College of Engineering, Chennai

Jun 2018 – Jun 2022 GPA: 8.88 (Sem VII)

B.Tech. Information Technology

**Courses:** Probabilty, Statistics, Discrete Mathematics, Data Structures, Machine Learning, Deep Learning

**Roles:** Head of the ML Division of PROCODE - official coding club of Department of IT, Class representative for four years.

## Vidya Mandir Senior Secondary School, Chennai

Grade 12, Computer Science Group

Jun 2017 – Jun 2018 Grade: 94.4%

#### **SKILLS**

**Programming Languages:** Python, C, C++, LAT<sub>E</sub>X **Frameworks:** PyTorch, TensorFlow, Keras, Git, AWS

Libraries: NumPy, pandas, scikit-learn, NLTK, spaCy, OpenCV

## **PUBLICATIONS**

End-to-End Speech Recognition of Tamil Language Paper Code

Intelligent Automation and Soft Computing Journal, 2022

Sign Language Translation using Multi Context Transformer 🔓 Paper 🗘 Code

 $20^{th}$  Mexican International Conference on Artificial Intelligence (MICAI), Mexico City, 2021 Won the 3rd best paper award.

### **EXPERIENCE**

### Mad Street Den, Machine Learning Intern, Chennai, India

Mar 2021 - Jun 2022

- $\rightarrow$  Part of the NLP core group which developed a tool for document processing using an OCR engine, image processing, and NLP techniques to extract unstructured data and convert them to a structured format.
- ightarrow Built Computer Vision models to serve educational recommendations.

Advisor: Mr. Anand Chandrasekharan

Solarillion Foundation, UG RA and TA (Part Time), Chennai, India 🐞 Website Feb 2020 – Present

- $\rightarrow$  Lead the team which worked on Sign Language Translation which won the 3rd best paper award at the  $20^{th}$  Mexican International Conference on Artificial Intelligence (MICAI), Mexico City, 2021.
- → Evaluated assignments and projects, Guided 10 students in Python, ML, DL and research phase.
- → Lead the website development team and was part of the server management team.
- → Wrote bots for posting office hours and creating polls.

Advisor: Mr. Vineeth Vijayaraghavan

### Prodian Info Tech Pvt Ltd, Summer Intern, Chennai, India

**Jun 2020 – Aug 2020** 

→ Applied unsupervised ML Algorithms to explore different patterns that affect a cricket match.

Advisor: Mr. Vijay Karthik

# **SELECTED PROJECTS**

# Terms of Service Classification (Code In Progress

Identify unfair Terms of Service clauses using a two-stage DL algorithm with knowledge distillation using state-of-the-art architectures like BERT.

## Fake News Detection using a Deep Learning Transformer architecture C Code 2022

Determining the integrity of a news source based on its title and content using a novel NLP architecture called FakeNews Transformer.

# Clickbait Classification Code 2020

Classifying clickbaits: articles with potentially misleading titles, using a state-of-the-art NLP architecture.

### Object Detection Using YOLO v3 Code 2020

Detecting everyday objects using the YOLO v3 network with a custom dataset.

### Flight Delay Prediction Code 2020

Two stage machine learning engine to predict arrival delay of flights in minutes.

### **Machine Translator** © Code 2020

English to French neural machine translator built using Transformer architecture in NLP.

### Portfolio Website C Code 2020

Personal website created using HTML5,CSS3 and hosted using Github pages. Page currently live at https://mbadrinarayanan.github.io

### Hotel Mangement System (Code 2019)

Software to facilitate hotel room bookings and provide billing operations.

# Railway Ticket Reservation System Code 2019

Software to facilitate train ticket booking system using MySQL and Visual Basic Forms.

### **SELECTED MOOC COURSES**

Natural Language Processing Specialization (Set of 4 Courses) Course Certificate Oct 2020 Coursera and DeepLearning.AI

**Master Computer Vision™ OpenCV4 in Python with Deep Learning Course Certificate Oct 2020** *Udemy* 

**Training YOLO v3 for Objects Detection with Custom Data** Course Certificate **July 2020** *Udemy* 

**TensorFlow Developer Specialization (Set of 4 Courses)** Course Certificate **Jun 2020** Coursera and DeepLearning.AI

**Deep Learning Specialization (Set of 5 Courses)** Course Certificate **Jun 2020** *Coursera and DeepLearning.AI* 

Natural Language Processing (NLP) with Python: 2020 Course Certificate Jun 2020 Udemy

**Python for Computer Vision with OpenCV and Deep Learning** Course Certificate **Jun 2020** *Udemy* 

#### **VOLUNTEERING AND RESPONSIBILITIES**

- → Conducted classes in NLP and CV, evaluated ML, DL assignments and projects as part of PROCODE.
- → Part of the tech team for SSN MUN 2021.
- → Volunteering with Chennai Volunteers to teach spoken English classes.

### AWARDS AND HONOURS

- → Was awarded the **Merit Scholarship** for the academic year 2021 2022 during my undergraduate study.
- → Won the **3rd best paper** for "**Sign Language Translation using Multi Context Transformer**" at Mexican International Conference on Artificial Intelligence (MICAI), 2021.
- → Part of the collegiate cricket team which won the Manipal Academy for Higher Education (MAHE) cricket tournament.
- → Won the **2nd best project** for Computer Science in Grade 12.