### 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++, Java, SQL, LATEX

Frameworks and Libraries: Git, AWS, TensorFlow, Keras, PyTorch, NumPy, pandas, scikit-learn, NLTK, spaCy,

OpenCV

Web Development: HTML5, CSS3, JavaScript

## **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 – Present

- $\rightarrow$  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.
- → Built Computer Vision models to serve educational recommendations.

Advisor: Mr. Anand Chandrasekharan

- $\rightarrow$  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 server management team.
- → Wrote bots for posting offfice hours and creating polls.

Advisor: Mr. Vineeth Vijayaraghavan

## Freelance Projects Freelancer Profile

Oct 2020 - Feb 2021

- → Undertook projects in Natural Language Processing and Computer Vision.
- → Built an NLP model to determine the ICD code diagnosis given a doctor's medical report.

#### 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**

## **Fake News Detection (Code In Progress**

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

## 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 Q 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

- → Won the **3rd best paper** for "**Sign Language Translation using Multi Context Transformer**" at Mexican International Conference on Artificial Intelligence (MICAI), 2021.
- → Lead my team to the top 550 in the RSNA-MICCAI Brain Tumor Radiogenomic Classification Kaggle competition from over 1500 participating teams.
- → 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.
- → Captained the school cricket team.