#### M BADRI NARAYANAN

### **EDUCATION**

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

Jun 2018 – Jun 2022

B.Tech. Information Technology

**CGPA: 8.955** 

<u>Courses:</u> Probabilty, Statistics, Discrete Mathematics, Data Structures, Machine Learning, Deep Learning <u>Roles:</u> 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++, LATEX

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

#### **PUBLICATIONS**

Fake News Detection using a Deep Learning Transformer Based Encoder-Decoder architecture Code M Badri Narayanan, Arun Kumar Ramesh, K S Gayathri, A Shahina

Submitted for review at IOS Press Journal of Intelligent & Fuzzy Systems, 2022

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

Mohamed Hashim Changrampadi, A Shahina, **M Badri Narayanan**, A Nayeemulla Khan Intelligent Automation and Soft Computing Journal, 2022

Sign Language Translation using Multi Context Transformer 📘 Paper 🗘 Code

**M Badri Narayanan**, K Mahesh Bharadwaj, G R Nithin, Dhiganth Rao Padamnoor, Vineeth Vijayaraghavan  $20^{th}$  Mexican International Conference on Artificial Intelligence (MICAI), Mexico City, 2021 Won the 3rd best paper award.

## **EXPERIENCE**

# QUALCOMM, Associate Engineer - AI/ML, Hyderabad, India

Iul 2022 - Present

- → Working on the development and maintenance of the existing testing framework for SNPE (SnapDragon Neural Processing Engine).
- → Working to automate the development and testing pipelines for running state-of-the-art deep neural networks efficiently and accurately on SnapDragon chipsets.

Advisor: Mrs. Archana Patil, Engineer - Staff / Manager

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

Mar 2021 – Jun 2022

- → 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, Founder and CTO

#### Solarillion Foundation, UG RA and TA (Part Time), Chennai, India Website Feb 2020 – Jun 2022

- $\rightarrow$  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, Director - Research and Outreach

# 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, Founder and CEO

# **SELECTED PROJECTS**

### Terms of Service Classification Code 2022

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

# 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 (Code 2020)

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

## **Hotel Mangement System (7 Code 2019**

Software to facilitate hotel room bookings and provide billing operations.

### Railway Ticket Reservation System C 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 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

- → Received the **Merit Scholarship** for my academic performance in the 3rd year of 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.