M BADRI NARAYANAN

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EDUCATION

Sri Sivasubramaniya Nadar (SSN) College of Engineering, Chennai   **Jun 2018 – Jun 2022**
B.Tech. Information Technology   **CGPA: 8.955**
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   **Jun 2017 – Jun 2018**
Grade 12, Computer Science Group   **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 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*
20th Mexican International Conference on Artificial Intelligence (MICAI), Mexico City, 2021
Won the 3rd best paper award.

EXPERIENCE

QUALCOMM, Associate Engineer - AI/ML, Hyderabad, India   **Jul 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**
→ Lead the team which worked on Sign Language Translation which won the 3rd best paper award at the 20th **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 🎧 **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 🎧 **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

Machine Learning 📄 Course Certificate May 2020
Coursera and Stanford University

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.