M Badri Narayanan

🌐 mbadrinarayanan.github.io ⬮ MBadriNarayanan in mbadrinarayanan
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EDUCATION

Sri Sivasubramaniya Nadar (SSN) College of Engineering (Autonomous),　**Aug 2018 – Jun 2022**
Affiliated to Anna University, Chennai, India
B.Tech. Information Technology　**CGPA: 8.955 / 10.00**
<u>**Courses:**</u> Probability, Statistics, Discrete Mathematics, Data Structures, Algorithms, Operating Systems, Database Management Systems, Compiler Design, Machine Learning, Deep Learning, and Artificial Intelligence.
<u>**Roles:**</u> Head of the ML Division of PROCODE - official coding club of the Department of IT, Class representative for four years.

Vidya Mandir Senior Secondary School, Chennai, India　**Jun 2017 – Jun 2018**
Grade 12, Computer Science Group　**Grade: 94.4%**

SKILLS

Programming Languages: Python, C, C++, LaTeX
Frameworks and Tools: 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 Journal of Intelligent & Fuzzy Systems, 2022
Journal indexed in Science Citation Indexed Expanded.

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, 2021
Journal indexed in Science Citation Indexed Expanded.

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
Paper published in Springer Lecture Notes in Artificial Intelligence (LNAI).
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

Solarillion Foundation, UG RA and TA (Part Time), Chennai, India　🌐 **Website**　**Feb 2020 – Present**
→ Completed the capstone project Terms of Service Classification, an NLP problem statement to uncover possibly unfair Terms of Service terms with the intention of publishing our findings.
→ 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 5+ 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

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

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.

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

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.

→ Volunteered with Chennai Volunteers to teach spoken English classes for socio-economically weaker students.

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.