





M BADRI NARAYANAN

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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**
Courses: Probability, Statistics, Discrete Mathematics, Data Structures, Algorithms, Operating Systems, Database Management Systems, Compiler Design, Machine Learning, Deep Learning, and Artificial Intelligence.
Roles: 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++
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 Index 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, 2021
Journal indexed in Science Citation Index 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**
→ Working on Terms of Service Classification, an NLP problem statement that uses a two-stage knowledge distillation DL approach on low-resource devices with cutting-edge architectures like BERT to find unfair Terms of Service terms.
→ 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 many 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

Prodiان 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

Freelance Projects  **Freelancer Profile** **Oct 2020 – Feb 2021**

Undertook projects from Freelancer.com in Natural Language Processing and Computer Vision. Completed a project with a US-based company “EasyComtec” to predict the ICD diagnosis code given a doctor report using Transformer architecture. I also developed a model to classify Arabic tweets into ham or spam.

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.

Machine Translator  **Code** **2020**

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

Flight Delay Prediction  **Code** **2020**

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

Portfolio Website  **Code** **2020**

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

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.