



CHAITREE SHAM BARADKAR



ACADEMIC DETAILS

Year	Degree / Board	Institute	GPA / Marks(%)
---	M.Sc in Cognitive Science	Indian Institute of Technology Delhi	9.289
2016	B.Tech. in Electronics and Communication Engineering	Visvesvaraya National Institute of Technology, Nagpur, Maharashtra	8.67
2012	XII, Maharashtra State Board	Shri Shivaji Science College, Nagpur, Maharashtra	94.00%
2010	X, Maharashtra State Board	Shri Kholeshwar Vidyalaya, Ambejogai, Maharashtra	96.73%

WORK EXPERIENCE

- **PharmaACE, Pune, Data Scientist** (July, 2019 - May, 2021)
 - Developed, trained, and tested different Machine Learning algorithms such as **SVM, XGBoost, and LSTM** for accurately predicting the progression in line of treatment in patients using medical claims data.
 - Worked with a diverse team to deploy a **time series forecasting tool** into production to forecast the demand of drug volumes using Machine Learning and Statistical Algorithms, which led to significant cost savings in the inventory.
 - Delivered a novel proof of concept that categorizes drug markets using Machine Learning algorithms for **time series clustering** on historical sales data.
 - Provided comprehensive analysis for the ad-hoc queries using different datasets for medical claims.
 - Mentored two internship projects in NLP semantic search and parameter optimization for statistical time series forecasting algorithms.
- **Tata Elxsi, Bangalore, Senior Engineer, R&D, Autonomous Vehicle Program** (July, 2016 - June, 2019)
 - Researched, developed, trained, and tested Object Detection and Classification, Lane Detection modules using **Convolutional Neural Networks (CNN)** to achieve better performance than existing computer vision algorithms.
 - Performed data collection, data annotation, data preparation, and transfer learning of developed Object Detection and Classification module to achieve targeted accuracy on Indian Road Datasets. Prepared **end-to-end inference** pipeline.
 - Developed, deployed, tested, and fine-tuned weighted multi-CNN traffic Sign Recognition module that achieved a near state-of-the-art **recognition rate of 99.5%**.
 - Optimized the developed CNN algorithms for NVIDIA GPU platforms and improved the execution time and memory required for CNN models.

TECHNICAL SKILLS

- Programming Languages - **Python**, C++, SQL, R
- Neural Networks - Convolutional Neural Networks, Long Short Term Memory (LSTM)
 - Successfully completed DeepLearning.AI *Deep Learning Specialization* from Coursera.org.
- Deep Learning Frameworks - Caffe, Tensorflow, Keras
- Others - OpenCV, GIT, ROS (Robot Operating System), Linux, Psychtoolbox (MATLAB), Behavioral Data Analysis

PUBLICATIONS & PATENTS

- Natarajan, S., Annamraju, A. K., & Baradkar, C. S. (2018). *Traffic sign recognition using weighted multi convolutional neural network*. IET Intelligent Transport Systems, 12(10), 1396–1405. <https://doi.org/10.1049/iet-its.2018.5171>
- Baradkar, C., Ganveer, A., Lokhande, S., & Surender, K. (2016). *Fuzzy Approach for Examining the Performance of Driver*. International Journal of Advanced Research in Computer and Communication Engineering, 5(7), 663–666. <https://doi.org/10.17148/IJARCCE.2016.57132>

INTERNSHIPS

- **Indian Institute of Technology Delhi, (Dr. Sumeet Agarwal and Dr. Varsha Singh)** (May, 2022 - July, 2022)
 - Automatically predicting the movement execution ratings of spinal cord injury (SCI) patients using machine learning to reduce human bias while evaluating the performance.

SCHOLASTIC ACHIEVEMENTS

- **Project Excellence Award for Autonomai (IP Initiative)** (January, 2017 – December, 2017)
- **NTSE exam scholarship:** Qualified National Talent Search Examination (NTSE) (June, 2008)

EXTRA CURRICULAR ACTIVITIES

- Volunteer, Lead Machine Learning Engineer, Omdena (AI for World Impact) (December, 2020 - May, 2021)
- Music - Completed four levels of Hindustani Classical Singing from Akhil Bharatiya Gandhrav Mahavidyalaya, Pune, India (November, 2001 - April, 2006)



CHAITREE SHAM BARADKAR



IIT COURSE

Degree	Institute	CGPA
M.Sc in Cognitive Science	Indian Institute of Technology Delhi	9.289

COURSES DONE

Basics Of Programming For Cognitive Science, Introduction To Cognitive Science, Research Methods In Cognitive Science, Cognitive Neuroscience, Advanced Data Analysis For Behavioral Research Using R, Mathematical Foundations For Cognitive Science, Computation And Cognition, Philosophy Of Mind And Cognition