ML Frameworks

- Deep Learning: PyTorch, Keras & Tensorflow
- Parallel Computing: MPI, OpenMP & CUDA (Basic)
- Small Experiments: OpenCV, SciPy, & Scikit-Learn
- Languages: Python, C++ Java (Basic), Bash & Lua

Research Activities

Peer Reviewing Activities
AAAI 2020
ICCV 2019
CVPR 2019 (Outstanding Reviewer)

Grants & Scholarships
Google India Travel Grant
CVIT Student Travel Grant (2018-Present)

IIIT-H Activities

Overall Coordinator
The Economics Club
IIIT-H

Member
Constitution Drafting Committee
IIIT-H

Organizer
Kings of Machine Learning
Felicity '17

Writer
Eye to the Future
Tech & Society Column, Ping!
Newsletter , IIIT-H

Work Experience

Machine Learning Intern, Verisk Analytics, Aug '18 - Oct '19
Working on Uncertainty Estimation for Bayesian Deep Networks, Calibration of Neural Networks and Active Learning. Published in EMNLP '19 on the same.

Machine Learning Intern, IBM-Research, India, May '18 - Aug '18
Worked on performing trainless neural architecture search efficiently with limited computational resources, learning unsupervised representations for neural networks for IBM Watson. Submitted a paper (Under review) as a result of the internship. Awarded best intern poster for outstanding research done in the internship.

Undergraduate Research Assistant - CVIT, IIIT-H, From Jan '16 - Aug '18
Worked on developing compressed representations for limited resourced systems, starting off with neural network compression for CNNs in the domain of Computer Vision. Published two oral papers in WACV 2018 on Binary Networks as a part of the assistantship.

Undergraduate Research Assistant - LTRC, IIIT-H, Jan '15 - Jan '16
Worked on developing resources for enabling systems to work on low-resource Hindi-English Code-mixed data, along with contributing machine learning algorithms for the same. Published a full paper in COLING on Sub-word LSTMs as a part of the assistantship.

Machine Learning Intern - WizCal Inc., Monsoon '16

Analyzed the corporate data, developed their feature processing pipeline and designed time-series processing based algorithms to build intelligent meeting-scheduling systems.

Teaching Assistantships, 2015-2018

I contributed by teaching in tutorial sessions, setting and grading assignments, supervising course projects in the following courses:

- **Computer Vision** *(Spring '18)*: The graduate-level introductory machine learning course (Instructor: Prof. Anoop Namboodiri, CVIT)
- **Foundations of AI and ML** *(Sping '18)*: Introduction to machine learning in an educational initiative by IIIT-H for professionals. (Instructor: Prof. C.V. Jawahar, CVIT)
- **Statistical Methods in AI** *(Monsoon '17)*: The graduate-level introductory machine learning course (Instructor: Prof. Vineet Gandhi, CVIT)
- **Digital Signal Analysis and App.** *(Spring '17)*: The introductory undergraduate signal processing course (Instructor: Prof. Vineet Gandhi, CVIT)
- **Computer Programming** *(Monsoon '16)*: The introductory undergraduate programming course (Instructor: Prof. Anoop Namboodiri, CVIT)
- **Electronics Workshop-1** *(Spring '16)*: The undergraduate freshman year course primarily designing analog circuits with a hands-on component involving handling lab equipment. (Instructor: Prof. Madhava Krishna, RRC)
- **Digital Logic and Processor Design** *(Monsoon '15)*: The undergraduate digital processor design course consisting of boolean logic to sequential logic, ALU designs, and programming basic 8085-like processor (Instructor: Prof. Vijay Prakash, RRC)

ML Projects

Neural Algorithm for Artistic Style in Sketches, Spring'17
Implemented the style transfer paper to transfer color between two images experimenting with different loss functions for the content and style loss and extending it to color sketches, obtaining an automatic colorization method for sparse domains

Unsupervised semantic sentence retrieval for use in Chatbot Systems, Spring'16

Developed a system to semantically rank relevant domain-related sentences using KNN and Skip-thought vectors to the current sentences fine tuned on a scraped Reddit dataset and showed that it is better than using TF-IDF based inverted index.