

Education

- **University of California, Santa Cruz** Dec 2022- June 2024
Masters in Electrical and Computer Engineering
- **Anna University; RMD Engineering College, Chennai** June 2014- April 2018
Bachelors of Engineering, Electronics, and Communication

Work Experience

- **Machine Learning Scientist II** Oct 2021- April 2022
Lytx Inc.
Bangalore, Karnataka, India
 - Development of compute-friendly ADAS based computer vision DL/ML models for hardware
 - Research and development experience in the following areas:
 - * Model compression and NAS techniques
 - * Knowledge distillation, Pruning, Quantization
 - * Optimizing and deploying inference on various embedded processors
 - * Signal Processing on mmwave Radars
- **Research Associate** Dec 2017- Sep 2021
NeuRonICS Lab, DESE Department,
Indian Institute of Science, Bangalore
 - Real-Time Object Detection and Localization in Compressive Sensing Video **ICIP 2021**
 - N-HAR: neuromorphic event-based human activity recognition system **ISCAS 2019**
 - Proto-object based visual saliency model on NVIDIA Jetson TX **ISCAS 2019**
 - n-EAR: Neuromorphic Ego Motion - Vehicle Activity Recognition **US Patent App. 17/377761**
 - System and Method for exhale controlled AAC device for IOT **IN Patent App. 201641044496**

Open Source Projects

- **sconce: Model Compression and Deployment Package** Developer
 - Built a one-stop compression package, that supports:
 - * Pruning, Quantization and NAS
 - * Deployment in ONNX, C/CUDA code generation
 - * Sparsity Engine and Support for Inference level Optimizations
- **snntorch: Gradient Based Spiking Neural Networks** Contributor
 - Built Pruners for Spiking Neural Networks
 - Built support for model compression for snn models on sconce

Technical Skills and Interests

Machine Learning, LLM, Deep Learning, Computer Vision, Model Compression, Signal Processing, Model Pruning, Quantization, MLOps/AIOps, Git, MATLAB, Python, C/C++, CUDA

Positions of Responsibility

– Reviewer

- * WACV 2019, 2020, 2022, 2023
- * TPAMI IEEE Transactions on Pattern Analysis and Machine Intelligence