Sathyaprakash Narayanan

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EDUCATION

•University of California, Santa Cruz

Masters in Electrical and Computer Engineering

Dec 2022- June 2024

•Anna University; RMD Engineering College, Chennai

Bachelors of Engineering, Electronics, and Communication

June 2014- Apr 2018

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: Spiking Neural Networks

Contributor

- Built Pruners for Spiking Neural Networks
- Built support for model compression for snn models on sconce

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 mmmwave 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. 17/377,761

TECHNICAL SKILLS AND INTERESTS

Machine Learning, Deep Learning, Computer Vision, Model Compression, 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