Yeshwanth Venkatesha

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EDUCATION

YALE UNIVERSITY
PhD in Electrical Engineering
2020 - Present | New Haven, CT, USA

IIT KHARAGPUR
B Tech in Computer Science
2013 - 2017 | Kharagpur, WB, India

VENTURES

WITLORE
2015 - 2016 | Kharagpur, WB, India
Knowledge-sharing web app in the model of a social network.

ZUFALPLAY
2015 | Kharagpur, WB, India
Web-based interactive platform to reward users' free time.

SKILLS

Programming Languages:
Python • C/C++ • Shell • JavaScript
ML/DS Tools:
PyTorch • TensorFlow • Caffe • Pandas
Web Technologies:
HTML • CSS • JS • MySQL • AWS

COURSEWORK

Building Interactive Machines
Computational Intelligence for Games
Neural Networks and Learning Systems
Optimization and Computation
Intelligent Robotics
Unsupervised Learning for Big Data
Advanced Machine Learning
Artificial Intelligence
Parallel and Distributed Algorithms

RESEARCH INTERESTS

Federated Learning • Model Compression • Neural Architecture Search • Deep Reinforcement Learning • Neuromorphic Computing

LINKS

LinkedIn:// yeshwanth-venkatesha
Github:// @yeshwanthv5
Google Scholar:// Yeshwanth-Venkatesha
Quora:// Yeshwanth-Venkatesha

WORK EXPERIENCE

INTELLIGENT COMPUTING LAB - YALE | Graduate Student
2020 – Present | New Haven, CT, USA
Working with **Prof Priya Panda** to explore efficient algorithms for applications of Deep Learning in energy efficient Distributed Learning systems in resource constrained edge devices.

WALMART LABS | Data Scientist
2019 - 2020 | Bangalore, KA, India
- Reinforcement Learning Models for personalized ads in Walmart search.
- User behavior modelling to target sponsored products on search results.

SAMSUNG R&D INSTITUTE | Software Engineer
2017 – 2019 | Bangalore, KA, India
- Neural network model optimization with pruning and quantization.
- Efficient neural network architecture search methods.
- Tensorflow/Caffe backend to custom hardware.

SAMSUNG R&D INSTITUTE | Student Trainee / Intern
2016 | Bangalore, KA, India
- Testing module of IP Multimedia System stack on LTE network.

CHALKSTREET | Product Architect Intern
2015 | Bangalore, KA, India
- Payment gateway for all the transactions on the platform. Email automation. Pattern recognition in server traffic to develop an efficient auto-scaling plan.

AWARDS & SCHOLARSHIPS

2018	Finalist	Samsung Best Paper Award (SBPA)
2017	2nd Runner-Up	ACM Kolkata Best B. Tech Dissertation Competition
2013	All India Rank - 342	IIT Joint Entrance Exam (JEE Advanced)
2013	Scholarship	Kishore Vaigyanik Protsahan Yojana (KVPY)
2011	Scholarship	Dakshana Foundation
2009	Scholarship	National Talent Search Examination (NTSE)

PUBLICATIONS & PATENTS

[1] O. Chakraborty, Y. Venkatesha, P. Mitra, and S. K. Ghosh. Multi-objective based road-link grading for health-care access during flood hazard management. In *Computational Science and Its Applications – ICCSA 2018*, pages 277–293, Cham, 2018. Springer International Publishing.

[2] K. Vasquez, Y. Venkatesha, A. Bhattacharjee, A. Moitra, and P. Panda. Activation density based mixed-precision quantization for energy efficient neural networks. In *Design, Automation & Test in Europe Conference & Exhibition, DATE 2021*.

[3] Y. Venkatesha, A. Deshwal, S. Krishnadasan, S. Lee, and J. Song. Sparse cnn architecture search (scas). In *2020 IEEE International Conference on Multimedia and Expo (ICME)*, pages 1–6, 2020.

[4] Y. Venkatesha, Y. Kim, L. Tassiulas, and P. Panda. Federated learning with spiking neural networks. *IEEE Transactions on Signal Processing*, 69:6183–6194, 2021.

[5] Y. Venkatesha, S. Krishnadasan, and A. Deshwal. Method and system with deep learning model generation, Apr. 2 2020. US Patent App. 16/549,299.