Contact

www.linkedin.com/in/iamshnik (LinkedIn)

Top Skills

Software Development
Machine Learning
Computer Vision

Publications

Escaping the Big Data Paradigm with Compact Transformers

Nikhil Shah

Co-founder Tersho (YC S22)
Jaipur, Rajasthan, India

Summary

Hi, I am Nikhil, a computer science engineer from IIT Kharagpur.

I am a budding entrepreneur. At Tersho, we are developing a no-code BI tool that lives inside spreadsheets.

Previously, I have pursued research in artificial intelligence and have published at top conferences. I have also worked with the Amazon ML team for a while before leaping into entrepreneurship.

My interest in entrepreneurship and product development has been fueled by my experience with building consumer products that have been used by tens of thousands of people.

Experience

Tersho
Co-Founder
December 2021 - Present (1 year)
Jaipur, Rajasthan, India

BlinkPe
Co-Founder
July 2021 - November 2021 (5 months)

Empowering shoppers with Scan&Go for the next generation shopping experience.

Amazon
Machine Learning Intern
May 2021 - August 2021 (4 months)
Bengaluru, Karnataka, India

University of Oregon
ML/CV Research Intern
April 2020 - April 2021 (1 year 1 month)

Eugene, Oregon, United States

Led research on the intersection of vision and language. Worked mainly on Transformers and related DNNs for visual question answering.

CERN
Deep Learning Intern
February 2020 - September 2020 (8 months)
Hong Kong SAR

I was involved in the ongoing research on the track classification for identifying tau-leptons from Boson decay. I am working on developing deep learning based algorithms to efficiently classify between the background noise and tau-jets.

Centre for Artificial Intelligence, IIT Kharagpur
Research Assistant
August 2019 - November 2019 (4 months)

Advisor: Prof. Sudeshna Sarkar

Topic: Context based question answering NLP model

• Developed a bidirectional auto encoder based model which uses the information extracted from context with out of reference knowledge to get the softmax probabilities over all the possible answers to a question

• Extracted the edge based relations to create commonsense inclusive word vectors from the multilingual knowledge graph, ConceptNet

Research Areas: Transformers, Attention Mechanisms, Encoder-Decoder Networks

Visual Information Processing Lab, IIT Kharagpur
Research Assistant
May 2019 - November 2019 (7 months)
Kharagpur Area, India

Visual Information Processing Lab, IIT Kharagpur

Advisor: Prof. Jayanta Mukhopadhyay

Topic: Design and implementation of algorithms for visual object tracking tasks

• Implemented deep learning based state of the art networks like DaSiamRPN. DaSiamRPN works at more than 200 FPS when tested on OTB2015 dataset and gives an AUC of more than 0.63 compared to 0.655 as mentioned in the paper

• Devised a new look-ahead approach for processing information from upcoming frames, when tested on KCF, it improves the estimated average overlap (EAO) by more than 5%

• Developed a model based on convolutional feature extractor paired with Kalman filter for search region prediction and a region proposal network for one shot arbitrary object detection to improve results in long term tracking
• Explored and experimented with novel approaches like verification networks and action driven reinforcement learning for object tracking
Research Areas: Siamese Networks, Region Proposal Networks, Recursive Bayesian Estimators

Education

Indian Institute of Technology, Kharagpur

BTech - Bachelor of Technology, Computer Science and Engineering · (2017 - 2021)