Nishant Rai

nishantrai18.github.io | nishantr@cs.stanford.edu

EDUCATION

STANFORD UNIVERSITY

MS - COMPUTER SCIENCE Specialization in A.I. Sep '19 - Current GPA: 4.0 / 4.0

IIT KANPUR

BTECH - COMPUTER SCIENCE Ranked 1st in the Department Apr '17 | Kanpur, India GPA: 9.9 / 10.0

LINKS

LinkedIn: **nishantrai**Github: **nishantrai18**Google Scholar: **NishantRai**

PROJECTS

MACHINE LEARNING

Sarcasm Detection in Social Media Instance Recommender System Reinforcement Learning for Games Sentiment Analysis of Social Media GAN based Image Up-sampling Real-time Vehicle Recognition Captcha Decoder Visual Question Answering Othello, Battleship AI Bot Image Caption Generation

OTHERS

Distributed Fault-tolerant Pipeline End-to-End ADA Compiler NachOS Operating System Multi-Sense Word Representation Course Management Database Geometric Data Structures

POSITIONS

TEACHING

CS231N: CNNs for Recognition CS145: Intro to Databases ESC101: Intro to Programming

MISCELLANEOUS

Core Team Academics, IIT Kanpur Programming Club, IIT Kanpur

SKILLS

C++ • Python • Scala • C • GoLang PyTorch • TensorFlow • OpenCV

WORK EXPERIENCE

NURO ML Perception Intern | Jun '20 - Sep '20 Worked with the Perception team boosting Obstacle Detection performance

STANFORD VISION LABResearch Assistant | Sep '19 - Current Working with Dr. Juan Carlos, Dr. Fei Fei Li on multi-view video perception

FYUSION Computer Vision Intern | Jun '19 – Sep '19 Designed Deep Neural Networks predicting 3D object structure from 2D images without any labelled data - powers Fyusion's perception stack.

RUBRIK Software Developer | Jul '17 - Jun '19

- Worked on the central <u>data management module</u> powering Rubrik
- Parallelized the <u>cloud upload framework</u> resulting in a <u>3-4x</u> speedup
- Designed and built Rubrik's first globally distributed SLA framework

TWO ROADS TRADINGML Trading Intern | May '17 – Jul '17
Designed and evaluated ML trading strategies based on stock price gaps

RESEARCH

C.A.R.I.S. LABResearch Intern | University of British Columbia
Developed approaches for human-robot interaction and point cloud alignment

XEROX RESEARCH Research Intern | Bangalore, India Designed ML algorithms for multi-view learning. Oral at ICPR '16

I.N.R.I.A. Research Intern | Rocquencourt, France Researched algorithms for <u>shortest paths</u> in massive road networks. Designed metrics for analysis of social networks. Published in the Journal - JST '16.

HIGHLIGHTED PROJECTS

Multi-View Learning for Action Classification	In Progress for CVPR
Self-supervised Learning for Video Understanding	WACV**
Unsupervised Inference of 3D Geometry from Images	WACV**
Deep Learning for Human Action Recognition in Videos	CVPR
Personality Trait Analysis through Videos	ICPR
Knowledge Graph Based Recommender System Us	se KG to Recommend
Seq2Seq Machine Translation	Language Translation
AutoML: Automated Machine Learning	Automate ML for ML

AWARDS

Gold Medal for best academic performance in graduating CS class	2017
Academic Excellence Award for outstanding academic performance	13, 14, 15
Scholarship for outstanding all-round achievement in the batch	2016
Gold Medal for outstanding performance at Indian Physics Olympiad	2013
Gold Medal for outstanding performance at Indian Mathematics Olympiad	2013

PUBLICATIONS

AdaScan: Adaptive Deep CNNs for Human Action Recognition	CVPR
Bi-Modal Regression for Apparent Trait Analysis	ICPR
Partial Multi-View Clustering Using GNMF	ICPR