Ayush Chopra

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EDUCATION

DELHI TECHNOLOGICAL UNIVERSITY
BE in Computer Engineering

Expected May 2018 | Delhi, India
major Percentage: 84.54%
cumm. Percentage: 82.12%

DELHI PUBLIC SCHOOL

Grad. May 2014 | Delhi, India
AISSE 96%
AISSCE 10.0/10

COURSEWORK

UNDERGRADUATE
Operating Systems + Practicum
Computer Networks and Security + Practicum
Database Management Systems + Practicum
Algorithm Design and Analysis
Theory of Computation
Computer Graphics
Discrete Mathematics
Information Theory
Analog and Digital Electronics

INDEPENDENT
Machine Learning - Coursera
Computer Vision - Udacity
Introduction to Big Data - Coursera

SKILLS

PROGRAMMING
Proficient:
Java • Python • C
Comfortable:
C++ • HTML5 • CSS3 • LaTeX • Shell
Libraries and Frameworks:
OpenCV • Keras
Caffe • Django • Spark
MySQL

AWARDS

Inspire Scholarship
• Offered by Ministry of HRD, Govt of India to top 1% students in country.
Principals Award
• Awarded at DPS upon graduation for all round excellence

EXPERIENCE

CODING BLOCKS | Assistant Instructor
Dec 2016 - Present | Delhi,India
- Working on Perceptron, the Machine Learning Course.

CVML,IIIT-DELHI | Visiting Researcher
Aug 2016 – Present | Delhi, India
- Mentored by Dr. Chetan Arora.
- Domain of Work:-Egocentric Vision and Virtual Reality

VISION AND AI RESEARCH DTU | Undergrad Researcher
Jan 2016 – September 2016 | Delhi, India
- Mentored by Dr. S. Indu and Prof. O.P Verma.
- Domains of Work:- Distributed Tracking, Convex Optimization.
- **Publication** under review at IEEE-CEC 2017.

SCFBIO, IIT-DELHI | Machine Intelligence Developer
May 2016 – July 2016 | Delhi, India
- Worked with Protein Structure and Function Team.
- Designed metric for protein topological comparison.

PROJECTS

COMBINATORICAL OPTIMIZATION | Evolutionary Optimization
Sept 2016 - Jan 2017 | VAIR DTU
- Motor Inspired High Dimensional Convex Optimization.
- Tested on CEC 2017 Benchmark and standard test functions.
- Publication submitted to IEEE CEC 2017.

MATHEMATICAL MOZART | Deep Learning
Nov 2016 - Dec 2016 | Coding Blocks
- Recurrent Neural Network based Music Generator.
- Look up audio sample on ayushchopra.me.

CONTENT BASED IMAGE RETRIEVAL | Deep Learning
Oct 2016 - December 2016 | DTU
- Minor Course Project for Semester of Fall 2016.
- Obtained 72.8% mAP on VOC 2007.

SURVEILLANCE AND TRACKING | Distributed Computing and Deep Learning
Jan 2016 – July 2016 | VAIR DTU
- End-to-end System for near real time path retrieval and tracking over distributed geospaces.
- Report link to shared on request.

TOPOLOGIZE | Algorithms and Bioinformatics
June 2016 - July 2016 | IIT-Delhi
- Algorithmic metric for sequence independent protein structural topology comparison based on representation in vector space.
- Obtained subsecond performance and surpassed precision of many existing metrics.