# Hunar Preet Singh

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in hunarpreet

#### EDUCATION

Indian Institute of Technology

CPI: 8.92/10.0

Kanpur, India July 2016 – Present

Buddha Dal Public School

Patiala, India

CBSE Class XII, 92.8%

2016

Saint Peter's Academy
CBSE Class X, CGPA: 10.0/10.0

Patiala, India 2014

#### Honors & Awards

# All India Rank 595, Joint Entrance Exam Advanced

India
July 2016

 $Among\ 1,50,000\ candidates$ 

IIT Kanpur

Academic Excellence Award

Secured award for excellent academic performance in academic year 2016-17

Dec 2016

Course (Manufacturing Processes-1) Project Adjudged as Special Mention Project

Among top 10 out of 100 course projects

IIT Kanpur Nov 2017

Amongst National Top 1% in National Standard Examination in Physics (IAPT)

India

Was amongst 6 selected students in Punjab state for Indian National Physics Olympiad

Nov 2015

KVPY Scholarship Awardee

India 2014

Secured All India Rank 495

India

Cleared NTSE Stage 1
Secured rank 14 in Punjab state

Nov 2013

#### **PROJECTS**

# N-Body Simulation (Using Parallel Computation)

Feb. 2017 - April. 2017

Association for Computing Activities (ACA)

IIT Kanpur

- **Description**: Built a visual simulation that demonstrates the path of particles in an multiple object gravity field systems using parallel computing (on a GPU) and then comparing serial and parallel implementation running times.
- Language and Libraries used: C++, OpenCV, CUDA Toolkit
- Serial Implementation: Runs the simulations using CPU's core.
- Parallel Implementation: Runs the simulations using GPU's cores.
- Link: https://github.com/hunarpreet1/nBody

# News Article Summarizer (Deep Learning and NLP)

May. 2017 - July 2017

IIT Kanpur

Programming Club

- **Description**: Implemented an extractive version of news article summarizer using various deep learning techniques. It gives a brief summary of any news article fed as input. The algorithm learns the word embeddings using skip-gram model, followed by sentence embeddings, and after their clustering the central sentence embeddings are calculated to give a decent summary.
- Dataset Used: The model is trained on Reuters Text Corpus
- Language and Libraries used: Python, Tensorflow
- Link: https://github.com/hunarpreet1/reuters\_main

## TECHNICAL SKILLS

- Languages: C/C++, Python, Java, JavaScript, HTML, CSS, Octave
- Utilities: Git, Latex, Open CV, CUDA
- Operating Systems: Linux(Ubuntu), Windows
- Miscellaneous: Machine Learning, Deep Learning, Natural Language Processing, Parallel Computing

## Relevant Coursework

- Data Structures and Algorithms
- Fundamentals of Computing
- Signals Systems and Networks
- Linear Algebra
- Complex Analysis (awarded A\*)
- Multivariable Calculus
- Probability and Statistics (ongoing)

#### Positions Of Responsibility

• Secretary • Programming Club	July 2017 - Present <i>IIT Kanpur</i>
Secretary Electronics Club	April 2017 - Present <i>HT Kanpur</i>
• Student Guide Counselling Service	May 2017 - Present  IIT Kanpur

### EXTRA CURRICULAR ACTIVITIES

- Participated in inter hall technical fest Takneek'16. Built an electronic version of chrome dinosaur game.
- Participated in an athletics (400 m) event in Freshers Inferno'16, an inter hall sports event for freshermen.
- Participated in inter hall cultural fest Spectrum'16.
- Participated in Microsoft code.fun.do 2017. Built an android quizzing app.