Hunar Preet Singh

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EDUCATION

Indian Institute of Technology		Kanpur, India
CPI: 8.92/10.0		*July 2016 – Present*
Buddha Dal Public School		Patiala, India
CBSE Class XII, 92.8%		*2016*
Saint Peter's Academy		Patiala, India
CBSE Class X, CGPA: 10.0/10.0		*2014*

HONORS & AWARDS

All India Rank 595, Joint Entrance Exam Advanced	India
Among 1,50,000 candidates	*July 2016*
Academic Excellence Award	IIT Kanpur
Secured award for excellent academic performance in academic year 2016-17	*Dec 2016*
Course (Manufacturing Processes-1) Project Adjudged as Special Mention Project	IIT Kanpur
Among top 10 out of 100 course projects	*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
Secured All India Rank 495	*2014*
Cleared NTSE Stage 1	India
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
Programming Club	*IIT Kanpur*

- **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

- Signals Systems and Networks
- Linear Algebra

- Data Structures and Algorithms
- Fundamentals of Computing

- Complex Analysis (awarded A*)
- Multivariable Calculus

- Introduction to Electronics
- Control Systems (ongoing)

- Microelectronics (ongoing)

- Probability and Statistics (ongoing)

Positions Of Responsibility

- **Secretary**   July 2017 - Present
  Programming Club   *IIT Kanpur*
- **Secretary**   April 2017 - Present
  Electronics Club   *IIT Kanpur*
- **Student Guide**   May 2017 - Present
  Counselling Service   *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.