

# Swati Gupta

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## EDUCATION

### IIT KANPUR

BTECH IN ELECTRICAL ENG.  
MINOR IN ENGLISH LIT.  
July 2014 - April 2018 | Kanpur  
CPI: 8.9/10.0

### IIS JAIPUR

SENIOR SECONDARY  
12<sup>TH</sup> | 10<sup>TH</sup>  
2014 | 2012  
Percent: 96% | CGPA 10.0/10.0

## COURSEWORK

### IIT KANPUR

- Visual Recognition
- Introduction to NLP
- Image Processing
- Probabilistic Mobile Robotics
- Cyber-Physical and Embedded Systems
- Data Structures and Algorithms
- Probability and Statistics
- Linear Algebra

### COURSERA

- Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning by deeplearning.ai, May 2019

## SKILLS

### PROGRAMMING

C • C++ • Python • Bash script • Pytorch • TensorFlow • OpenCV • Git • ROS • Matlab •  $\text{\LaTeX}$

### SOFTWARE

OpenStack • SVM-light/libSVM • Arduino • Verilog • Android Studio/Eclipse

### FAMILAR OS

Linux/Ubuntu • Windows

## VOLUNTEERING

## WORK

### STUDENT GUIDE | ACADEMIC MENTOR

Jul 2015-Apr 2016 |  
Counselling service, IIT Kanpur

## WORK EXPERIENCE

### JUNIPER NETWORKS, INDIA | SOFTWARE ENGINEER II, MANAGEABILITY TEAM

July 2018 - Present | Bangalore, India

- Building the architecture, design and solution implementation for device management software on Junos (Juniper OS) specific to Junos Node Slicing Project. This project enables service providers and large enterprises to create a network infrastructure that can consolidate multiple routing functions into a single physical device.

## INTERNSHIP

### UNIVERSITY OF TEXAS AT DALLAS | STUDENT INTERN, DEPT. OF COMPUTER SCIENCE, UT DALLAS

PROJECT TITLE: TIMELINE: CROSS DOCUMENT EVENT ORDERING  
May 2017 - July 2017 | Dr Vincent Ng, Dept.of CS, UT Dallas, TX, USA

- Extracted relevant event and time mentions from the NewsReader Dataset using Stanford CoreNLP, an integrated NLP toolkit and performed temporal tagging.
- Implemented new kernel methods like Subset Tree kernels based on Dependency trees for Relation extraction and trained an SVM Classifier using them to link events to the correct time instances of their occurrence

## PROJECTS

### INTELLIGENT AUTONOMOUS GROUND VEHICLE | TEAM LEADER AND COMPUTER VISION HEAD, TEAM IGVC, IIT KANPUR

Sept 2016 - April 2017 | Dr Gaurav Pandey, EE Dept, IIT Kanpur | Dr Mangal Kothari, AE Dept, IIT Kanpur

- Built and tested numerous computer vision algorithms to detect chalk lanes on grassy surface and avoid obstacles using sensors like LIDAR and Camera.
- Created a system for online mapping of surroundings (lanes and obstacles) using continuous LIDAR and camera data stream.

### DEEP LEARNING FOR FOR REAL-TIME IMAGE ENHANCEMENT | COURSE PROJECT, VISUAL RECOGNITION, IIT KANPUR

Aug 2017 - Nov 2017 | Dr Vinay Namboodri, CSE Dept, IIT Kanpur

Successfully implemented the paper by Gharbi, Michaël, et al, titled "Deep Bilateral Learning for Real-Time Image Enhancement" in Pytorch, from scratch using a new CNN architecture which preserves edges, details and is computationally very efficient on high resolution images.

### CLEAN ENERGY - ABU ROBOCON 2016 | SENIOR MEMBER, TEAM ROBOCON IIT KANPUR

Sept 2015-Mar 2016 | Dr Bhaskar Das Gupta, Center for Mechatronics, IIT Kanpur  
Developed 2 semi-autonomous Robots, with one providing non-contact driving energy to propagate the other on a complex path, then exchange a wind propeller to climb up a Wind Turbine Pole (about 2m) in automated mode.

## AWARDS

2016 3<sup>rd</sup>/110 teams

2015 top 25

2015 1<sup>st</sup>/70 teams

2012 Silver Medallist

2012 AIR 23, KVPY fellow

2012 AIR 1

2008 NTSE Scholar

ABU Robocon 2016 - Nationals

Academic Excellence Award, IIT Kanpur

Manufacturing Process, Shenron Dragon

9<sup>th</sup> International Junior Science Olympiad (IJSO), Tehran, Iran

Kishore Vaigyanik Protsahan Yojana (KVPY), Govt of India

National Science Talent Search Examination(NSTSE), UC

National Talent Search Examination (NTSE), Govt Of India