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^{TH}		10^{TH}
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 • 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, 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, 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^{rd}/110 teams	ABU Robocon 2016 - Nationals
2015	top 25	Academic Excellence Award, IIT Kanpur
2015	1^{st}/70 teams	Manufacturing Process, Shenron Dragon
2012	Silver Medallist	9^{th} International Junior Science Olympiad (IJSO), Tehran, Iran
2012	AIR 23, KVPY fellow	Kishore Vaigyanik Protsahan Yojana (KVPY), Govt of India
2012	AIR 1	National Science Talent Search Examination(NSTSE), UC
2008	NTSE Scholar	National Talent Search Examination (NTSE), Govt Of India