

## EDUCATION

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- **New York University** Manhattan, NY  
*Master of Science in Computer Science; GPA: 3.81* *Sep. 2017 – Present*
- **Indian Institute of Technology and Science** Mandi, India  
*Bachelor of Engineering in Electrical and Electronics; GPA: 8.13/10.0* *Aug. 2013 – June 2017*

## AWARDS

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- **Kaggle**: Secured 2nd position in NYU Traffic Sign Competition.
- **Siemens Data Science Hackathon**: Secured 1st prize among 60 teams the held at LMU, Munich
- **Siemens-CKI Hackathon**: Secured 1st runner-up held at TU, Munich in Mar. 2017.
- **IIT Joint Entrance Exam**: Was in top 1 percentile of total around 1,500,000 candidates.
- **National Maths Talent**: Won the GOLD medal at 25th ManavSthali National Maths Talent held at Delhi, India.

## EXPERIENCE

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- **New York University** Manhattan, NY  
*Research Assistant, Prof. Rob Fergus* *Oct 2017 - Present*
  - **Multi-Agent Communication**: Research on developing a novel deep learning architecture for multi-agent continuous communication over non-fully cooperative tasks in Reinforcement Learning set-up. PyTorch
  - **Generative Adversarial Imitation Learning**: Research on imitation learning using generative model. Designed a novel method for using Generative Adversarial Networks (GAN) as environment simulator for model-based Reinforcement Learning. PyTorch
- **Udacity** Mountain View, CA  
*Reviewer and Mentor* *Feb. 2017 - Present*
  - **Student Mentor**: Mentor & project review 100s of students enrolled in Deep Learning, Data Analysis Nanodegree.
- **Indian Institute of technology** Mandi, India  
*Research Assistant, Prof. Aditya Nigam* *Feb. 2017 - June 2017*
  - **Biometric Data Synthesis Using GAN**: Research on using multiple generators and discriminators to speed-up generation process of generative adversarial networks (GAN). Multiple discriminators with varying architecture provided empirical speedup during training time. Python, PyTorch.
- **TU Munich** Munich, Germany  
*Research Assistant, Prof. C. Prehoeff* *Aug. 2016 – Mar. 2017*
  - **Indoor Localization**: Developed localization mechanism to get the indoor structure of walls, user position and activity and provide indoor location prediction using mobile sensors.
- **Innovation Lines** Chandigarh, India  
*Machine Learning Intern* *Dec. 2015 – Feb. 2016*
  - **Smart Systems**: Using object (person) detection (via CNN), developed automated video adverts . Developed smart irrigation system based on physical measurements from sensors using neural network for classification.

## PROJECTS

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- **PocketPrinter**: Developed a hand-sized printer capable of printing on all flat surfaces of any size and controlled it via an android application and capable of doing voice-to-print or text-to-print.
- **File Tone Transfer Protocol**: Used audio waves to transfer text files between machines within ear-shot distance.
- **Weather Stations & Server**: Developed and deployed multiple weather data collecting stations (built on BBB) across university campus and deployed with a central server.

## LANGUAGE AND TECHNOLOGIES

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C++, Python, Java, JavaScript, SQL, MATLAB, C,  $\text{\LaTeX}$

## SELECTED COURSES

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Machine Learning, Deep Learning, Computer Vision, Reinforcement Learning, Natural Language Processing