

Statement Of Purpose

I, Srijan, am currently pursuing my bachelors from Maharaja Agrasen Institute of Technology, Delhi in the field of Electronics and Communication Engineering and would like to apply for Summer Internship in your prestigious institute. I have a keen interest in Machine Learning, Deep Learning, Neural Networks, and Image Processing which got stimulated in me at a very nascent age in school, when I studied the design of Curiosity Rover and developed a dummy model for the school exhibition. Since then, I have created various advanced projects such as line follower robot using P.I.D controller, worked in fabrication of drone, developed prototype of self-balancing robot in eYantra - 2019, and another in Smart India Hackathon (SIH) where in team of 6, we built smart street light system using Arduino, motion sensors, LDR and machine learning, which can reduce the average energy consumption by street lights in night and also switch on and off based on the real time traffic. I have done various online courses on Coursera such as "Python For Everybody" from Michigan University, "Machine Learning" from Stanford University and specialization in "Deep Learning and Neural Networks" from deeplearning.ai.

I am really Passionate about deep learning and Computer vision and have previously worked on making facial and object recognition models that can detect the object type from a real-time webcam image. I have done a research Internship at IIT-BHU where I built a Multi-class classification of river water quality using Machine Learning techniques and future prediction of river water quality using Deep Learning predictive models like LSTM on real-time data from IoT sensors.

In my free time, I try to automate stuff around me. While working on Raspberry Pi, I built my own smart switching lights for my room. I, developed a simple robot using servo motors and Arduino to play the famous piano tiles game on mobile phone and a simple Robotic arm prototype which can lift light objects with ease. I am familiar with programming languages like Python, C++, and C and Data structures. I am really inspired by the Boston Dynamics technologies and one day, I would really like to build a 4-legged robot which can mimic a cat

I have also written a research paper about classification of 275 bird species using transfer learning with efficientnet lite and further deployed it in an android application which can help normal user to just click the image and get the species and details about the bird, with an accuracy of approx. 98% obtained on test dataset. I have also worked with a start-up called Visudh Ajivam, a private limited company in android development and further developed and deployed their only app on Google play store which has crossed more than 10,000 downloads in first 2 days only, it helps users to book online medicines and appointments of doctors with just one click. I am a very hard working student and have a good knowledge of Python, C++ and Data structures, which has helped me in implementing various deep learning models in many practical uses.

I want to enhance my current knowledge base and want to do resolve problems and tasks for the welfare of people and advancement in technological fields.