

Research Statement

I am currently doing a Research Intern under the supervision of Prof. Balasubramanian Raman in IIT Roorkee in the field of Deep Learning (more specifically Medical Imaging). Our research paper titled "Transfer learning based framework for image segmentation using medical images and Tversky similarity" is under review currently and another paper on Federated Learning is submitted in ICIP-2023. This is my first research experience and I found it exciting and it piqued my interest. I am thus interested in the field of Deep Learning and its applications to solve real-world problems.

I have done multiple projects on Quantum Computing, Computer Architecture too. I would also like to explore Graph Neural networks and Computer Vision. I am also thinking to work on Graph Neural Networks as soon as my paper gets completed. I am more interested in doing research which is meaningful to society rather than research that is confined to the lab. For me, quality of the paper matters more than the quantity of papers. Also, I won't confine myself to the fields mentioned in this, but am willing to push my limits to explore other areas and fields too. I think I can also bring a new perspective to Research into AI as I feel when we do simple things like reading, driving we are unknowingly applying algorithms which have been so imbibed into us that we don't realise they are algorithms. Also, I am genuinely excited by new developments in this field.

Also, I do research out of fun rather than out of compulsion, I have always felt that doing something wholeheartedly is better than doing many things half heartedly. I hope you have got an idea of why I want to do research.