## 1 Student Survey

- I have taken the courses Differential calculus; Integral calculus; Linear algebra; Probability and statistics; Image processing.
- 2. The research topic which interests me is Bayes theorem in machine learning. I want to develop a career in Data Science and Artificial Intelligence, so the topics related to that interests me a lot. I love the course probability and statistics. I have done research in Image Processing during my under grad, its related to image enhancement in frequency domain.
- 3. I am from Electronics background, I have done my major in Electronics and Communications during my under grad. Since I am from an electronics background my programming skills are not that great I would rate 6 for my coding skills. I am good at math I can rate 8 for my math skills.
- 4. I want to develop a career in Data science and AI. I have some basic knowledge about AI and some topics like Neural Networks. I want to go deep and learn more about AI and have some hands on so that I can mention about this in my resume so that it adds value to my resume.

## 2 Additional Exercises

I am not sure about  $11.\int \infty - \infty dx exp[-(\pi/2)x2] = \sqrt{2}$  question, for the rest I can answer true or false but if you ask me prove them then I need to look back at books. I need to work on my element math since I forgot some formulas, so I need to do a brush up for my classes and I will be doing that.