### **Letter of Motivation**

#### Akash Cherukuri

### Introduction

I am Akash Cherukuri, a second year undergraduate pursuing my B.Tech in Computer Science and Engineering, currently in my **Third Semester**. I am interested in the fields of Machine Learning, Image Processing and Theoretical Computer Science. I am highly interested in applying the concepts that I have learnt to practical scenarios, and would be very delighted to be a part of your esteemed programme. I am currently learning the statistical methods used for analyzing data, and some techniques used in image processing.

# **Background and Motivation**

I have a strong background in coding, and my projects further strengthen my point. I have had a taste of how exciting the field of machine learning can be while I was working on one of my projects, "L.A.M.A. AI using Reinforcement Learning". This project involved the implementation of a Q-Learning model, during which I'd read up on the basics of hyperparameter tuning. I found the area extremely interesting, which is why I'd love to learn more in this exciting field.

I am also keenly interested in image processing. I have recently been introduced to some of the ways in which analysis of images are done, such as using **Principal Component Analysis**, and I have also put these concepts to use in various places. This included the construction of images using eigen decomposition of the image, and generating clusters using the **K-Means** algorithm as a part of the project.

## **Concluding Remarks**

Given my experience, I believe that I would be the right fit for your programme. I think that being a part of your programme would be a wonderful opportunity for me to learn and explore. I am a punctual worker, and am always on the lookout for new and exciting ideas in these fields. I eagerly look forward to being a part of this programme and contributing to it, all the while gathering valuable takeaways as I do so.