Dear Prof. X,

I am writing to apply for the PhD fellowship position at the <Research Lab or Intitute> in <PlaceY>. I am a \_\_\_\_ PhD student at the Department of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ , working under the supervision of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. I have attached the curriculum vitae that contains my academic background, publication record, as well as the list of references.

I have recently completed my <Masters> degree in <Month, Year> from <InstituteB>, under the supervision of \_\_\_\_\_\_\_\_\_\_\_\_\_ . My thesis was titled \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. This work was a result of a collaboration with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Here, we <short bio of Master thesis>.

During my Master’s, I started developing an aspect-based ranking model for the clinical trial search system. The primary challenge faced was two-fold — (1) existing systems work only for oncology-based trials and do not cover other disease classes. (2) a homogeneous information network of clinical trials is very sparse. We thus develop a framework that uses an ancillary bibliographic network of PubMed, an archive of biomedical articles, to improve both the retrieval and ranking performance of the search system. Presently, I am working on two projects involving medical data (both text and image form) from the past year, one on medical text summarization and the other on the intent classification of online medical forum posts. Working on these medical informatics projects, in addition to my computer science background, has given me first-hand knowledge and a unique opportunity to work towards tackling the computational challenges related to the medical domain. It includes the availability of a limited number of benchmark datasets like MIMIC-III, and the difficulty to reproduce results due to the lack of access to the private medical datasets used by the authors.

I am particularly interested in the following projects: <ProjectA> and <ProjectB>. These projects are crucial in recent times and will have a significant impact on society in the future. I am quite motivated to pursue this line of research and am confident that based on my prior research experience, I will be able to make meaningful contributions to this field. This will also prove to be an excellent learning experience for me during my Ph.D. and I look forward to working with the researchers of your esteemed institution.

I am enthusiastic about the possibility of working at the <Research Lab or Institute>. I thank you for your consideration, and I look forward to hearing from you.

Thanks and regards,  
<Your name>  
<Other details>