

Name: Saptarshi Majumder

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Institute: IIT Bombay

Motivation

1. Please tell us why you wish to join NEC (Not more than 300 words)

NEC is a world leader in large scale IT systems and services and thereby boasts of a plethora of incredibly talented people, industry experts and thereby scopes out huge amounts of resources and opportunities for anyone willing to make it big in their career. Through the internships in my academic career, I have witnessed first hand that the learnings gathered when out of your comfort zone are manifold. Not only because of the vast amount of knowledge that we can gather but also how we can get insights into working from people belonging to different geographical places and regions.

I am interested in the role of 'Researcher (Recognition) Permanent' offered by NEC as I feel it aligns with my domain work and skills that I have gathered throughout my academic career and Internships/work experience. For me the motivation is to learn a lot from various people at NEC.

Suitability:

2. Please tell us why you think you are a suitable candidate and how your experience and skills would be of benefit to the company (Not more than 300 words)

During my pre-final year internship as a Deep learning researcher in the University of Cambridge, England, since it was a long internship so initially I joined quite a few different teams involved in the project and found out what I like the best and subsequently what suits me. This allowed me to navigate on quite a few domains of computer science from App development, DevOps and NLP/Computer vision. I finally stayed in the Deep Learning team and spent an amazing few months learning from industry experts the tricks of the trade. The demands and roles every week more or less, but mainly I was tasked to research various state-of-the-art models in deep learning which suited our cause and start spinning up the code for them. We were able to finally come up with a novel benchmark hybrid deep learning model (hybrid model in the sense that it involved a fair bit of computer vision and NLP) for depression status estimation which was quite a significant result at the time. Owing to my contributions to the team, I was subsequently made a co-author of the paper titled '*Depression Status Estimation by Deep Learning based Hybrid Multi-Modal Fusion Model*'. We have currently sent out our paper for publication in the reputed [Nature AI](#) journal.

This year in December I'm scheduled to present another of my papers titled '*EMRs with Blockchain: A distributed democratised Electronic Medical Record sharing platform*' at the

reputed International Blockchain Conference and I'm glad to say that our results have been accepted in the [Springer LNCS](#) journal.

Career Goals:

3. Please tell us about your career aspirations and what you would like to achieve with NEC (Not more than 300 words)

As far as my aspirations lie, I love the prospect of researching deep learning in various domains to automate and ease the mundane processes of everyday life with a goal to make for a sustainable life for everyone. I love tinkering with the the mathematics of machine learning and interested in applying efficient Deep Learning models real-world problems. I am also pretty invested in the mathematical nitty-gritties of the problems posed by society and delve deeper into solving problems of model robustness and computational efficiency. I want to use my mathematical and statistical knowledge to learn more about machine learning,deep learning. I firmly believe that at NEC if offered the role,I would be able to continue in the path where my interests and passion lies and would be able to achieve a lot in my career learning from Industry experts at NEC and by achieving team and personal milestones and thereby nurture the growth of my career.

Reasons for wishing to relocate to Japan to live and work

It is well known throughout the world that Japan is the center of a mixed culture which combines state of the art modern technologies and a very ancient rich culture that promotes knowledge and art. I would be happy to delve into the nitty-gritties of modern technologies and the artistic pleasure.