Statement of Purpose

I am Aditya Saripalli currently working in IBM India Systems Development Labs, Hyderabad. I am involved in firmware development of the Hypervisor layer in IBM Power Systems. I joined International Institute of Information Technology (IIIT) Hyderabad, in Spring 2018 to pursue masters in the area of Machine Learning.

I believe in the fact that – unless we do find a way to run software on "air" – we need systems. Now, with the advent of Machine Learning in almost every field today, it has become a necessity to design high speed computing systems which could run computationally expensive machine learning workloads like deep learning or its equivalent in real time. That's where my interest lies in.

I am interested in exploring the intersection area of Systems and Machine Learning. Fueled by this thought I joined the master's program (PGSSP) in IIIT Hyderabad to learn machine learning and AI in depth. I hereby successfully completed my first semester with 2 (max count of the subjects offered to the PGSSP students per semester) subjects – Statistical Methods in Artificial Intelligence (SMAI) & Game Theory. The Courseware / Assignments and Projects helped me in understanding the basic concepts of Machine Learning in depth. However, there is a huge ground to cover yet.

I was trying to follow the SysML conference started this year to understand the current research in Systems and Machine Learning, when I received the CASS 2018 workshop email. The syllabus / topics of the workshop in performance modelling and metrics of computing systems, Parallel programming models / GPU programming, computer architecture in OS and compilers etc. made me over excited in applying for the workshop.

The workshop will help me a lot in understanding the latest computing systems architecture, GPU, ISA and would further help me closer to my goal. A theoretical learning of the systems concepts like GPU programming, Compiler stack, performance modelling etc. alone won't do any good. One should also gain some hands-on experience in realizing the concepts and CASS will be a perfect place to get both. Experience and knowledge gained through the workshop will help me in my upcoming semesters and research.

Closing the dialog with the fact that I am very much excited and enthusiastic in attending the workshop. I would like to thank you for giving me an opportunity to apply for CASS and hopeful in getting an invite for the same.

Thank You.