**LETTER OF RECOMMENDATION**

I would like to recommend B Sai Venkatesh for the MS program in Robotics at your esteemed institution. I have known Sai in my capacity as his project guide for five months during his internship at the Centre for Artificial Intelligence and Robotics. During this period, I was highly impressed by his tenacity and yearning to learn.

Sai conducted himself proficiently throughout the internship and approached the project with great enthusiasm. His quality of work highlighted his aptitude to grasp concepts rapidly and apply them. Under my guidance, he worked on **Path Tracking Control of Autonomous Ground Vehicle (AGV)**. Despite having limited practical experience with the project domain, he was a quick learner who was quickly able to navigate the nuances of the field. As part of the project, Sai had to design a controller for the AGV, for which he examined various control systems. Initially, he worked on a Robust Adaptive Sliding Mode controller with power reaching law. He designed the controller in MATLAB/Simulink and co-simulated with CarSim under different environments. After completing this controller's design and extensive testing, Sai suggested experimenting with the more complex Model Predictive Controller (MPC) as a better alternative for the given objective. He assessed the effectiveness of the controllers for a variety of maneuvers and environments. I was delighted with his perseverance and determination to keep trying to get accurate results. It shows his interest in the project and his research aptitude.

Considering his determination, research aptitude and work ethic, I strongly believe he would be an asset to your esteemed graduate school. Thus, it is with deep conviction that I recommend Sai Venkatesh for admission to your master’s program.