## **Department of Mining Engineering**

## To whomsoever it may concern

Date: 9, August 2020

This is to certify that **Mr. Kousshik Raj (17CS30022)** has been an active member of the Autonomous Ground Vehicle (Autonomy and Intelligence) Research Group (AGV.AI) under the Centre of Excellence in Robotics under my supervision from February 2018.

During this period he has worked on various projects and competitions like IGVC 2019 and worked on Planning and Localization modules. Implemented and tested DWA on Husky. Worked on improving Hybrid-Astar for continuous path planning and involved in testing it on Mahindra e2o. Worked on Eklavya.

Sincerely yours,

Dr. Debashish Chakravarty

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Thahravort

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